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MICROCIRCUIT DEVICE RELIABILITY DIGITAL FAILURE RATE DATA, SUMM--ETC(U)

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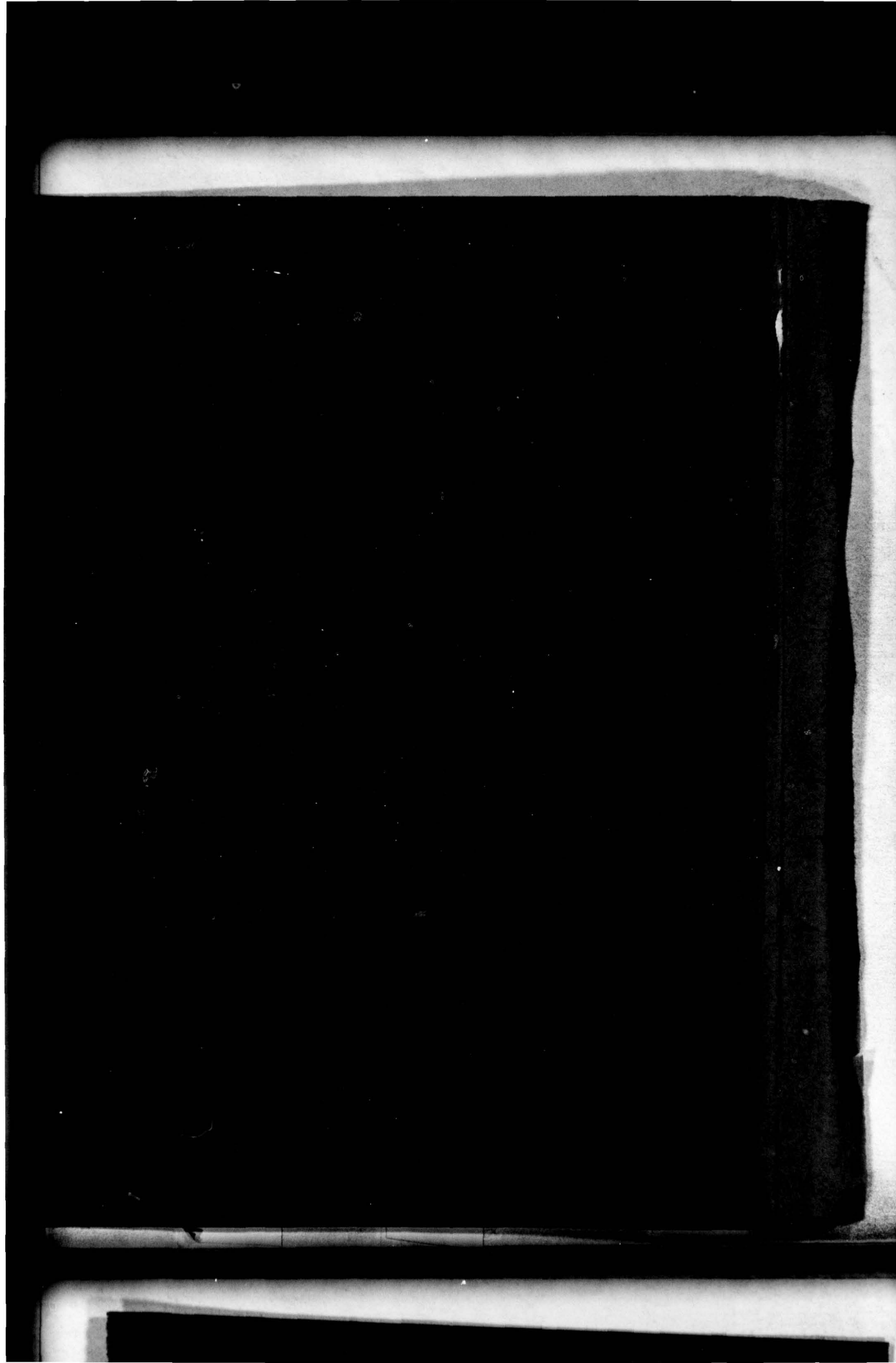
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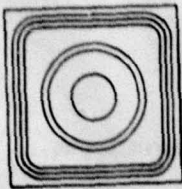
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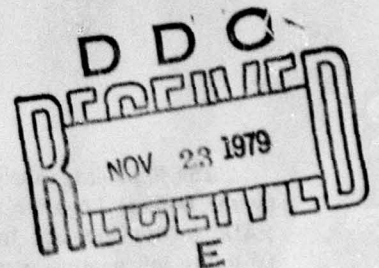
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Reliability Analysis Center

A DoD Information Analysis Center



Microcircuit Device Reliability

DIGITAL FAILURE RATE DATA

Summer 1979

Prepared by:

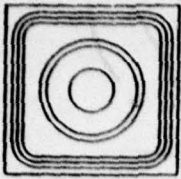
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The Reliability Analysis Center is a DoD Information Analysis Center, operated by IIT Research Institute under contract to the Rome Air Development Center, AFSC.

The Reliability Analysis Center (RAC) is a Department of Defense Information Analysis Center sponsored by the Defense Logistics Agency, managed by the Rome Air Development Center (RADC), and operated at RADC by IIT Research Institute (IITRI). RAC is charged with the collection, analysis and dissemination of reliability information pertaining to parts used in electronic systems. The present scope includes integrated circuits, hybrids, discrete transistors and diodes, microwave devices, optoelectronics, and selected nonelectronic parts employed in military, space and commercial applications.

In addition, a System/Equipment Reliability Corporate Memory (RCM) is also operating under the auspices of the RAC and serves as the focal point for the collection and analysis of all reliability-related information and data on operating and planned military systems and equipment.

Data are collected on a continuous basis from a broad range of sources including testing laboratories, device and equipment manufacturers, government laboratories, and equipment users, both government and nongovernment. Automatic distribution lists, voluntary data submittal, and field failure reporting systems supplement an intensive data solicitation program.

Reliability data documents covering most of the device types mentioned above are available annually from RAC. Also, RAC provides reliability consulting and technical and bibliographic inquiry services which are fully discussed at the end of this document.

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PREFACE

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This is one of a series of annual data publications dealing with micro-circuit reliability which includes hybrid, linear and interface, and memory and LSI devices. Other volumes treat discrete semiconductor (including opto-electronic and microwave) and nonelectronic components.

Each document contains analyzed reliability information in addition to the detailed presentation of field and test results. (Digital SSI/MSI micro-circuit reliability is now divided into two separate publications: Digital Failure Rate Data, which presents and analyzes the results of life testing, equipment level reliability demonstration testing and field experience, and Digital Evaluation and Generic Failure Analysis Data, which deals with the results of burn-in and environmental screening tests, as well as relates the generic failure analysis results as derived from hundreds of failure events.) This information aids in determining device fallout rates and the operational test and field reliability characteristics of devices. Life test results and their relationships to field experience, as well as observed versus predicted failure rates, can be reviewed. The relative risks of screening decisions may also be examined. Additionally, information is available to form the foundation for failure mode effects and criticality analyses (FMECA). Through the data presented, these publications are intended to actively complement such publications as MIL-STD-883B and MIL-HDBK-217C. The user is cautioned that the data contained herein may not be used in lieu of other contractually cited references.

The Rome Air Development Center's computer facilities and the extensive cooperation of the Reliability and Compatibility Division (RADC/RB) and the Information Sciences Division (RADC/IS) and its personnel were a vital factor in the generation of this compendium.

The detailed data section was printed directly from the Reliability Analysis Center's computerized data base utilizing a customized file system approach developed by the RAC programming staff. This system allows the generation of special reports and analyses wherein the data is categorized to match the needs of the user.

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INTRODUCTION

This microcircuit device reliability compendium features failure and replacement rate data on SSI and MSI digital microcircuits. The data used in this publication were collected, reduced and refined from a broad spectrum of government and industry sources by the Reliability Analysis Center in order to present objective and relevant information for widespread usage. This publication is divided into two major sections: Digital Summarized Data and Digital Device Data-Detailed Listings.

The "Digital Summarized Data" section is comprised of a useful compilation of failure and replacement rates as they have been derived from equipment level operation and component life test results collected by the RAC. Failure rates are presented for several generic classes of devices and comparisons are made based upon environment, operational type and other, more detailed, criteria. Field replacement rates are handled in a similar manner. In addition, an analysis of MIL-HDBK-217B predicted and observed field experience failure rates is provided.

The "Digital Device Data-Detailed Listings" section consists of data at the part number level. These listings present the detailed parameters of life, field, reliability demonstration and equipment checkout data and are categorized by operational type, device manufacturer, and part number.

The data contained herein may be applied to part selection and device failure/replacement rate estimation. By the reader's analysis of the data, operational types exhibiting higher failure/replacement rates for a given set of parametric and environmental conditions can be avoided, thereby decreasing field repair costs. System and device failure rates can then be reassessed and adjusted to ensure more accurate and realistic MTBF predictions.

DEFINITIONS OF TERMS, STATISTICAL METHODS, AND
ABBREVIATIONS USED IN THE DATA ANALYSIS

1. Confidence Interval or Limits: The confidence intervals given in this book are two-sided 60% intervals computed from the Chi-squared distribution using $2r$ and $2(r+1)$ degrees of freedom, respectively. The lower limit of the interval is the 20% confidence level and the upper limit is the 80% confidence level. The Chi-squared 60% confidence interval is defined, then, as the statistical range of values which would, with a 60% probability, include the actual mean of an infinite sample.

2. Part Hours: The number of parts tested multiplied by the operating duration in the equipment or on test (in hours).

3. Point Estimate Failure Rate or Maximum Likelihood Failure Rate Estimator ($\hat{\lambda}$):

$$\hat{\lambda} = r/n$$

where:

r = number of reported failures

n = number of reported part hours

This number is generally normalized to failures/ 10^6 hours ($F/10^6$) and is applicable only to exponential failure rate distributions (constant failure rates).

4. Point Estimate Replacement Rate or Maximum Likelihood Replacement Rate Estimator ($\hat{\lambda}_R$):

$$\hat{\lambda}_R = r_R/n$$

where:

r_R = number of reported replacements

n = number of reported part hours

Defined only for the purposes of this publication and directly applied only to the Summarized Generic Replacement Rate - Field Data subsection, this number is normalized to replacements/ 10^6 hours ($R/10^6$) and is applicable only to exponential replacement rate distributions (constant replacement rates).

5. Primary Failure: A failure which causes equipment to perform outside of specified limits - one which occurs without being induced by the failure of an associated item(s). A failure not caused either directly or indirectly by the failure of an associated item(s).

6. Replacement: The removal of a device from a higher level component (i.e. removing an IC from a PC board) as a result of the primary failure of the component (the PC board) which causes the equipment to perform outside of specified limits. The removed device may subsequently be classified as a primary failure (defined above), a secondary failure (defined below), or an unfailed device with the verified failure information unavailable. In the instance of an unfailed device, it is counted as a replacement only if it is known that the device is not re-installed on the subject component. Replacements as a result of preventive maintenance actions or engineering changes do not apply.

7. Secondary Failure: A failure of a part which is the direct result of a primary failure - one which is caused by a failure of an associated item(s). These failures have not been included in the failure rate data but may be present in the replacement rate data.

Abbreviations

OPERATIONAL TYPE (OP TYPE):

CMOS	Complementary, Metal Oxide Semiconductor
PMOS	P-Channel, Metal Oxide Semiconductor
DTL	Diode-Transistor Logic
ECL	Emitter-Coupled Logic
HTTL	High Speed, Transistor-Transistor Logic
LTTL	Low Power, Transistor-Transistor Logic
STTL	Schottky, Transistor-Transistor Logic
LSTTL	Low Power, Schottky, Transistor-Transistor Logic
SUHL	Sylvania Universal High-Level Logic
TTL	Transistor-Transistor Logic

Abbreviations (Cont'd)

APPLICATION ENVIRONMENT (APP ENV):

AI	Airborne, Inhabited
AU	Airborne, Uninhabited
AIU	Airborne, Inhabited/Uninhabited
GBC	Ground, Benign, Commercial
GBM or MGB	Ground, Benign, Missile
GF	Ground, Fixed
GM	Ground, Mobile
GT	Ground, Transportable
NSS	Naval Sheltered, Submarine

Section 1 DIGITAL SUMMARIZED DATA

Introduction

The summarized data are presented to provide more meaningful insight into the effects of such factors as package type, operational logic type, device gate complexity, device junction temperature, environmental stress and screen class levels on the failure rates or replacement rates of SSI and MSI digital microcircuit devices.

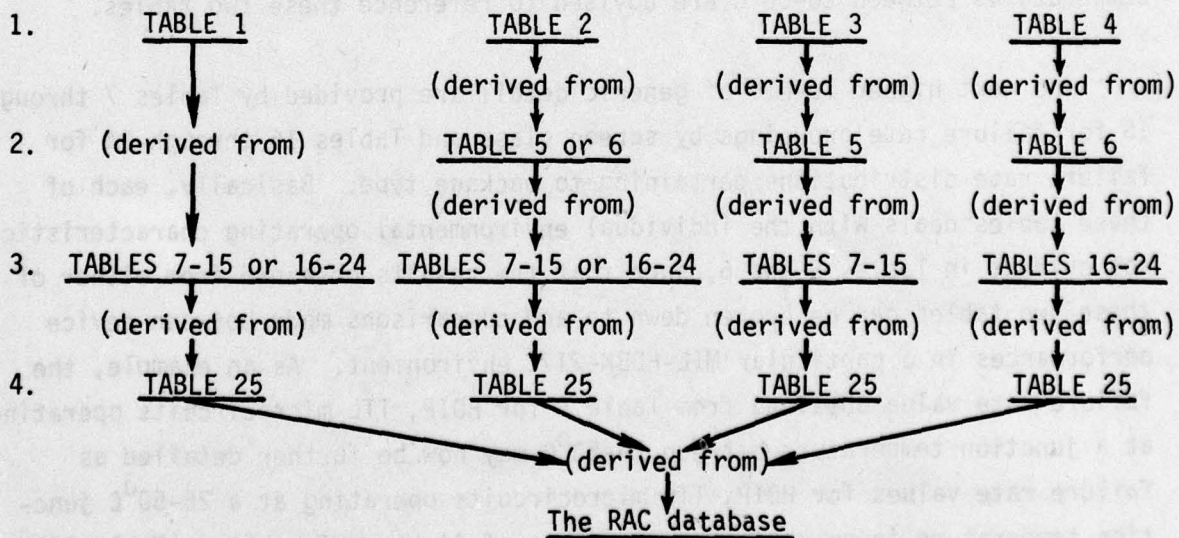
This summary section is segmented into five subsections, the first of which is entitled "Summarized Generic Failure Rates - Field Data" and provides several different cross-sections of summarized field data covering the calendar time period 1973 to the present. The second subsection, "Digital Microcircuit Observed and MIL-HDKB-217B Predicted Failure Rates", analyzes the most significant relationships between the summarized generic device-level field data and theoretically predicted failure rate values. "Summarized Generic Replacement Rates - Field Data" begins to look into the analysis of warranty-type data, where replaced parts may not be specifically categorized as reported failures. The final two subsections represent a summarized presentation of the failure rates of microcircuit devices as a result of equipment-level testing and different categories of life testing and are entitled "Summarized Generic Failure Rates - Reliability Demonstration and Equipment Checkout Data" and "Summarized Generic Failure Rates - Life Test Data", respectively.

The primary responsibility of Section 1, then, is to serve as an aid to those who require generic failure rate or replacement rate information on digital microcircuits from any one of several available formats. Individuals requiring more customized information concerning the failure rates of these devices are invited to contact the Reliability Analysis Center directly.

SUMMARIZED GENERIC FAILURE RATES - FIELD DATA

The summarized generic field failure rates represented in Tables 1 through 25 are a compilation of detailed equipment level field experience information. The data are presented using four basic generic levels of summary and are grouped according to those devices and operational characteristics deemed most applicable to the users' needs.

The data contained herein is provided as a complement to, but not a replacement for, the failure rate information in MIL-HDBK-217C. The structured format of these field experience presentations will give greater insight into the inherent reliability of each generic device class and its dependence upon operational types, environmental stresses, gate complexities, quality levels, package types and junction temperatures. The user is cautioned that the data presented in this publication may not be used in lieu of other contractually cited references and specifications. A graphic illustration of the levels of summarization and the sources of derivation is given below, beginning with the least detailed of the summarized tables:



As indicated, Tables 1 through 4 represent the most generic device classifications. Each one of these tables lists digital microcircuit failure rates for a unique category [environment (Table 1), operational type (Table 2), screen class (Table 3), and package type (Table 4)] without regard to any secondary influences which might have an effect on the comparative results. For instance, Table 1 ("Field Failure Rates By Environment") does not explicitly reveal the distributions, and hence the effects, of screen class levels and/or package types between different field environments. Therefore, care must be exercised in the analysis of these failure rates. Once these limitations are understood, these four tables become useful in providing a glimpse of overall digital microcircuit device reliability.

Tables 5 and 6 provide a more comprehensive insight into the results of Tables 3 and 4, as they relate the field failure rate experiences of each screen class level as a direct function of device operational type (Table 5) and the field failure rate experiences of each package type as influenced by various junction temperature ranges and operational types (Table 6). Readers wishing to compare failure rates of parts such as screen class B-1, TTL microcircuits to those of screen class N, TTL devices, or who would like to know the observed failure rates of HDIP, TTL microcircuits operating at junction temperatures between 26-50°C are advised to reference these two tables.

The next higher levels of generic detail are provided by Tables 7 through 15 for failure rate groupings by screen class and Tables 16 through 24 for failure rate distributions pertaining to package type. Basically, each of these tables deals with the individual environmental operating characteristics not evident in Tables 5 and 6, such that the results obtained from either of these two tables can be broken down to and comparisons made between device performances in a particular MIL-HDBK-217C environment. As an example, the failure rate value obtained from Table 6 for HDIP, TTL microcircuits operating at a junction temperature between 26-50°C may now be further detailed as failure rate values for HDIP, TTL microcircuits operating at a 26-50°C junction temperature in operating environments of Airborne Inhabited (Table 16), Airborne Inhabited/Uninhabited (Table 17), Airborne Uninhabited (Table 18),

Ground Benign Commercial (Table 19), Ground Fixed (Table 21), Ground Mobile (Table 22), Ground Transportable (Table 23), and Naval Sheltered, Submarine (Table 24).

The most highly detailed generic summary table is Table 25, entitled "Generic Failure Rates - Field Data," from which Tables 7 through 24 were developed. Compiled from the detailed computer listings of Section 2 of this publication as well as utilizing additional microcircuit reliability information obtained from the RAC database, each generic line entry is categorized according to operational type, application environment, screen class, package type, gate complexity (specified as a range) and junction temperature (designated T_j and also specified as a range). This table expresses failure rates for each device class based upon the criteria mentioned above and contains the necessary information required to perform a generic MIL-HDBK-217C prediction.

Qualification for calculation of the point estimate failure rate ($\hat{\lambda}$) and the 60% confidence interval failure rates (both of which are defined in the "Definitions of Terms, Statistical Methods, and Abbreviations Used In The Data Analysis" on page 3) are based upon the following guidelines:

1. 0 failures with $\geq 500,000$ accumulated part hours
1 failure with $\geq 250,000$ accumulated part hours
2 failures with $\geq 125,000$ accumulated part hours
2. The devices must have had an applied power/voltage stress.

TABLE 1 : FIELD FAILURE RATES BY ENVIRONMENT

APPLICATION ENVIRONMENT	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
AI	135,065,642	14	0.080	0.10	0.13
AIU	100,815,883	24	0.20	0.24	0.29
AU	49,849,922	21	0.34	0.42	0.52
GBC	103,522,892	22	0.17	0.21	0.26
GBM	54,916,786,170	1049	0.018	0.019	0.020
GF	696,292,987	314	0.43	0.45	0.47
GM	245,016,159	67	0.24	0.27	0.30
GT	46,189,625	2	0.018	0.043	0.093
NSS	272,780,868	0	--	--	0.0059

TABLE 2 : FIELD FAILURE RATES BY OPERATIONAL TYPE

OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
CMOS	654,140	0	--	--	2.5
PMOS	240,000,016	67	0.25	0.28	0.31
DTL	55,122,217,940	1055	0.019	0.019	0.020
ECL	44,770,136	6	0.087	0.13	0.20
HTTL	56,200,521	25	0.37	0.44	0.54
L TTL	11,064,995	0	--	--	0.15
STTL	27,501,286	14	0.39	0.51	0.66
LSTTL	24,480,588	0	--	--	0.066
SUHL	30,941,930	2	0.027	0.065	0.14
TTL	1,008,488,596	344	0.33	0.34	0.36

TABLE 3: FIELD FAILURE RATES BY SCREEN CLASS

SCREEN CLASS	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
A-1	54,916,786,170	1049	0.019	0.019	0.020
B-1	375,729,751	9	0.017	0.024	0.033
B-1 or JB	3,137,097	0	--	--	0.51
JB	91,230,322	1	0.0024	0.011	0.033
B-2	120,958,497	16	0.10	0.13	0.17
B-2 to N	14,146,593	20	1.1	1.4	1.7
C-1	236,919,195	18	0.061	0.076	0.095
N	769,663,523	398	0.50	0.52	0.54
X	37,748,984	2	0.022	0.053	0.11

TABLE 4: FIELD FAILURE RATES BY PACKAGE TYPE

PACKAGE TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HDIP	410,738,422	38	0.080	0.093	0.11
HFPK	55,452,874,510	1092	0.019	0.020	0.020
PDIP	702,707,201	383	0.52	0.55	0.57

TABLE 5: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)

FIELD DATA

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
A-1	COMBINED	54,916,786,170	1049	0.019	0.019	0.020
	DTL	54,916,786,170	1049	0.019	0.019	0.020
B-1	COMBINED	375,729,751	9	0.017	0.024	0.033
	DTL	26,960,292	0	--	--	0.060
	ECL	235,753	0	--	--	--
	HTTL	9,037,564	0	--	--	0.18
	LITL	5,559,715	0	--	--	0.29
	STTL	5,938,433	0	--	--	0.27
	SUHL	28,073,029	1	0.0079	0.036	0.11
	TTL	299,924,965	8	0.019	0.027	0.038
B-1 or JB	COMBINED	3,137,097	0	--	--	0.51
	CMOS	317,520	0	--	--	--
	HTTL	109,911	0	--	--	--
	STTL	1,008,031	0	--	--	1.6
	TTL	1,701,635	0	--	--	0.95
JB	COMBINED	91,230,322	1	0.0024	0.011	0.033
	LITL	3,453,728	0	--	--	0.47
	TTL	87,776,594	1	0.0025	0.011	0.034
B-2	COMBINED	120,958,497	16	0.10	0.13	0.17
	DTL	14,882	0	--	--	--
	LITL	381,552	0	--	--	--

TABLE 5: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA (Cont'd)

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-2 (Cont'd)	SUHL TTL	967,287 119,594,776	1 15	0.23 0.098	1.0 0.13	3.1 0.16
B-2 to N	COMBINED	14,146,593	20	1.1	1.4	1.7
	DTL	333,981	0	--	--	--
	ECL	4,647	0	--	--	--
	HTTL	425,446	0	--	--	--
	TTL	13,382,519	20	1.2	1.5	1.8
C-1	COMBINED	236,919,195	18	0.061	0.076	0.095
	DTL	166,471,545	2	0.0049	0.012	0.026
	ECL	256,522	2	3.2	7.8	17.
	HTTL	11,591,872	2	0.071	0.17	0.37
	SUHL	1,901,614	0	--	--	0.85
	TTL	56,697,642	12	0.16	0.21	0.28
N	COMBINED	769,663,523	398	0.50	0.52	0.54
	CMOS	183,552	0	--	--	--
	PMOS	240,000,000	67	0.25	0.28	0.31
	DTL	11,651,070	4	0.20	0.34	0.58
	ECL	44,273,214	4	0.052	0.090	0.15
	HTTL	34,882,660	22	0.52	0.63	0.77
	LTTL	1,670,000	0	--	--	0.96
	STTL	14,500,970	13	0.68	0.90	1.2
	LSTTL	453,096	0	--	--	--
	TTL	422,048,961	288	0.65	0.68	0.72

TABLE 5: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA (Cont'd)

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
X	COMBINED	37,748,984	2	0.022	0.053	0.11
	CMOS	153,068	0	--	--	--
	HTTL	153,068	1	--	--	--
	STTL	6,053,852	1	0.037	0.17	0.49
	LSTTL	24,027,492	0	--	--	0.067
	TTL	7,361,504	0	--	--	0.22

TABLE 6: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HDIP	COMBINED	COMBINED	410,738,422	38	0.080	0.093	0.11
		COMBINED	370,032,004	30	0.068	0.081	0.096
	26-50	DTL	14,359,486	0	--	--	0.11
		ECL	42,727,284	4	0.054	0.094	0.16
		HTTL	4,828,644	0	--	--	0.33
		LTTL	8,894,413	0	--	--	0.18
		STTL	7,174,338	0	--	--	0.22
		SUHL	27,985,793	1	0.0080	0.036	0.11
		TTL	264,062,046	25	0.078	0.095	0.11
		COMBINED	40,236,554	8	0.14	0.20	0.28
	51-75	CMOS	317,520	0	--	--	--
		DTL	9,042	0	--	--	--
		ECL	1,285,380	0	--	--	1.3
		HTTL	671,274	0	--	--	2.4
		LTTL	5,278	0	--	--	--
		STTL	35,918	0	--	--	--
		TTL	37,912,142	8	0.15	0.21	0.30
		COMBINED	469,864	0	--	--	--
HFPPK	COMBINED	COMBINED	55,452,874,510	1092	0.019	0.020	0.020
		COMBINED	108,005,515	8	0.052	0.074	0.11
	26-50	DTL	845,132	2	0.98	2.4	5.1
		HTTL	74,507	0	--	--	--
		LTTL	2,165,304	0	--	--	0.74
		SUHL	2,868,901	1	0.078	0.35	1.0
		TTL	102,051,671	5	0.030	0.049	0.077
		COMBINED	108,005,515	8	0.052	0.074	0.11
		COMBINED	55,452,874,510	1092	0.019	0.020	0.020
		COMBINED	108,005,515	8	0.052	0.074	0.11
		DTL	845,132	2	0.98	2.4	5.1
		HTTL	74,507	0	--	--	--
		LTTL	2,165,304	0	--	--	0.74
		SUHL	2,868,901	1	0.078	0.35	1.0
		TTL	102,051,671	5	0.030	0.049	0.077

TABLE 6: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA (Cont'd)

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HFPK (Cont'd)	51-75	COMBINED	55,314,882,150	1074	0.019	0.019	0.020
		DTL	55,096,390,250	1049	0.019	0.019	0.020
		ECL	350,149	2	2.4	5.7	12.
		HTTL	15,903,028	2	0.052	0.13	0.27
		SUHL	87,236	0	--	--	--
	76-100	TTL	202,151,482	21	0.084	0.10	0.13
		COMBINED	29,020,792	10	0.25	0.34	0.47
		DTL	8,962,960	2	0.092	0.22	0.48
		ECL	38,541	0	--	--	--
		TTL	20,019,291	8	0.28	0.40	0.57
PDIP	101-125	COMBINED	966,057	0	--	--	1.7
		TTL	966,057	0	--	--	1.7
	COMBINED	COMBINED	702,707,201	383	0.52	0.55	0.57
		COMBINED	447,509,601	310	0.66	0.69	0.73
		CMOS	336,620	0	--	--	--
		DTL	1,651,070	2	0.50	1.2	2.6
		HTTL	34,723,068	23	0.54	0.66	0.81
	26-50	STTL	20,291,030	14	0.53	0.69	0.89
		LS TTL	24,480,588	0	--	--	0.066
		TTL	366,027,225	271	0.70	0.74	0.78
	51-75	COMBINED	254,571,600	73	0.26	0.29	0.32
		PMOS	240,000,000	67	0.25	0.28	0.31
	76-100	TTL	14,571,600	6	0.27	0.41	0.62
		COMBINED	626,000	0	--	--	2.6
		TTL	626,000	0	--	--	2.6

TABLE 7: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - AI ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-1	COMBINED	14,762,984	0	--	--	0.11
	DTL	12,259,332	0	--	--	0.13
	ECL	4,305	0	--	--	--
	HTTL	34,020	0	--	--	--
	LTTL	9,042	0	--	--	--
	STTL	50,833	0	--	--	--
	SUHL	87,236	0	--	--	--
	TTL	2,318,216	0	--	--	0.69
B-1 or JB	COMBINED	317,520	0	--	--	--
	CMOS	317,520	0	--	--	--
B-2	COMBINED	119,500,000	14	0.090	0.12	0.15
	TTL	119,500,000	14	0.090	0.12	0.15
B-2 to N	COMBINED	443,778	0	--	--	--
	DTL	327,445	0	--	--	--
	TTL	116,333	0	--	--	--
N	COMBINED	41,360	0	--	--	--
	TTL	41,360	0	--	--	--

TABLE 8: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - AIU ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-1	<u>COMBINED</u>	<u>31,947,870</u>	<u>6</u>	<u>0.12</u>	<u>0.19</u>	<u>0.28</u>
	DTL	288,442	0	--	--	--
	ECL	14,984	0	--	--	--
	HTTL	2,228,222	0	--	--	0.72
	LTTL	113,752	0	--	--	--
	STTL	369,614	0	--	--	--
	TTL	28,932,856	6	0.13	0.21	0.31
C-1	<u>COMBINED</u>	<u>68,868,013</u>	<u>18</u>	<u>0.21</u>	<u>0.26</u>	<u>0.33</u>
	DTL	461,545	2	1.8	4.3	9.3
	ECL	256,522	2	3.2	7.8	17.
	HTTL	11,591,872	2	0.071	0.17	0.37
	SUHL	1,901,614	0	--	--	0.85
	TTL	54,656,460	12	0.17	0.22	0.29

TABLE 9: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - AU ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-1	<u>COMBINED</u>	<u>34,105,909</u>	<u>1</u>	<u>0.0065</u>	<u>0.029</u>	<u>0.088</u>
	DTL	53,032	0	--	--	--
	HTTL	2,409,720	0	--	--	0.67
	LITL	174,616	0	--	--	--
	TTL	31,468,541	1	0.0071	0.032	0.095
B-2 to N	<u>COMBINED</u>	<u>13,702,815</u>	<u>20</u>	<u>1.2</u>	<u>1.5</u>	<u>1.8</u>
	DTL	6,536	0	--	--	--
	ECL	4,647	0	--	--	--
	HTTL	425,446	0	--	--	--
	TTL	13,266,186	20	1.2	1.5	1.9
C-1	<u>COMBINED</u>	<u>2,041,182</u>	<u>0</u>	<u>--</u>	<u>--</u>	<u>0.79</u>
	TTL	2,041,182	0	--	--	0.79

TABLE 10: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - GBC ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
N	COMBINED	65,773,908	20	0.25	0.30	0.38
	DTL	191,070	0	--	--	--
	ECL	43,581,330	4	0.053	0.092	0.15
	HTTL	312,660	0	--	--	--
	STTL	14,490,426	13	0.68	0.90	1.2
	LSTTL	453,096	0	--	--	--
X	TTL	6,745,326	3	0.23	0.44	0.82
	COMBINED	37,748,984	2	0.022	0.053	0.11
	CMOS	153,068	0	--	--	--
	HTTL	153,068	1	--	--	0.49
	STTL	6,053,852	1	0.037	0.17	0.067
	LSTTL	24,027,492	0	--	--	0.22
	TTL	7,361,504	0	--	--	

TABLE 11: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - GBM ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
A-1	COMBINED	54,916,786,170	1049	0.019	0.019	0.020
	DTL	54,916,786,170	1049	0.019	0.019	0.020

TABLE 12: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - GF ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-1	COMBINED	167,252,740	2	0.0049	0.012	0.026
	DTL	14,359,486	0	--	--	0.11
	HTTL	3,929,002	0	--	--	0.41
	STTL	2,072,677	0	--	--	0.78
	SUHL	27,985,793	1	0.0080	0.036	0.11
	TTL	118,905,782	1	0.0019	0.0084	0.025
B-1 or JB	COMBINED	2,819,577	0	--	--	0.57
	HTTL	109,911	0	--	--	--
	STTL	1,008,031	0	--	--	1.6
	TTL	1,701,635	0	--	--	0.95
JB	COMBINED	67,388,574	1	0.0033	0.015	0.044
	TTL	67,388,574	1	0.0033	0.015	0.044
N	COMBINED	458,832,096	311	0.65	0.68	0.71
	CMOS	183,552	0	--	--	--
	DTL	11,460,000	4	0.20	0.35	0.59
	HTTL	34,570,000	22	0.52	0.64	0.78
	LTL	1,670,000	0	--	--	0.96
	STTL	10,544	0	--	--	--
	TTL	410,938,000	285	0.66	0.69	0.73

TABLE 13: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - GM ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
N	COMBINED	245,016,159	67	0.25	0.27	0.31
	PMOS	240,000,000	67	0.25	0.28	0.31
	ECL	691,884	0	--	--	2.3
	TTL	4,324,275	0	--	--	0.37

TABLE 14: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - GT ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-1	COMBINED	20,889,380	0	--	--	0.077
	HTTL	436,600	0	--	--	--
	LTTL	5,262,305	0	--	--	0.31
	STTL	3,445,309	0	--	--	0.47
	TTL	11,745,166	0	--	--	0.14
JB	COMBINED	23,841,748	0	--	--	0.068
	LTTL	3,453,728	0	--	--	0.47
	TTL	20,388,020	0	--	--	0.079
B-2	COMBINED	1,458,497	2	0.57	1.4	2.9
	DTL	14,882	0	--	--	--
	LTTL	381,552	0	--	--	--
	SUHL	967,287	1	0.23	1.0	3.1
	TTL	94,776	1	--	--	--

TABLE 15: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
FIELD DATA - NSS ENVIRONMENT

SCREEN CLASS	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
B-1	<u>COMBINED</u>	<u>106,770,868</u>	<u>0</u>	--	--	<u>0.015</u>
	ECL	216,464	0	--	--	--
	TTL	106,554,404	0	--	--	0.015
C-1	<u>COMBINED</u>	<u>166,010,000</u>	<u>0</u>	--	--	<u>0.0096</u>
	DTL	166,010,000	0	--	--	0.0096

TABLE 16: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - AI ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HDIP	COMBINED	COMBINED	1,841,353	0	--	--	0.87
		COMBINED	706,239	0	--	--	2.3
	26-50	HTTL	4,521	0	--	--	--
		LTTL	9,042	0	--	--	--
		STTL	14,915	0	--	--	--
		TTL	677,761	0	--	--	2.4
	51-75	COMBINED	1,135,114	0	--	--	1.4
		CMOS	317,520	0	--	--	--
		DTL	9,042	0	--	--	--
		HTTL	25,495	0	--	--	--
HFPK	COMBINED	COMBINED	133,224,289	14	0.081	0.11	0.14
		COMBINED	336,294	0	--	--	--
	26-50	DTL	89,401	0	--	--	--
		TTL	276,893	0	--	--	--
	51-75	COMBINED	131,093,058	13	0.076	0.099	0.13
		DTL	12,465,374	0	--	--	0.13
		ECL	4,305	0	--	--	--
		HTTL	4,004	0	--	--	--
		SUHL	87,236	0	--	--	--
		TTL	118,532,139	13	0.084	0.11	0.14

TABLE 16: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - AI ENVIRONMENT (Cont'd)

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% $(F/10^6 \text{ Hours})$	$\hat{\lambda}$ $(F/10^6 \text{ Hours})$	UPPER 80% $(F/10^6 \text{ Hours})$
HFPK (Cont'd)	76-100	COMBINED	<u>1,747,717</u>	<u>1</u>	<u>0.13</u>	<u>0.57</u>	<u>1.7</u>
		DTL	22,960	0	--	--	--
	101-125	TTL	<u>1,724,757</u>	<u>1</u>	<u>0.13</u>	<u>0.58</u>	<u>1.7</u>
		COMBINED	<u>17,220</u>	<u>0</u>	<u>--</u>	<u>--</u>	<u>--</u>
		TTL	<u>17,220</u>	<u>0</u>	<u>--</u>	<u>--</u>	<u>--</u>

TABLE 17: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - AIU ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% ($F/10^6$ Hours)	λ ($F/10^6$ Hours)	UPPER 80% ($F/10^6$ Hours)
HDIP	COMBINED	COMBINED	21,897,446	1	0.010	0.046	0.14
		COMBINED	16,496,146	0	--	--	0.074
	26-50	HTTL	5,206	0	--	--	--
		STTL	369,614	0	--	--	--
		TTL	16,121,326	0	--	--	0.10
	51-75	COMBINED	5,401,300	1	0.041	0.19	0.55
		HTTL	189,589	0	--	--	--
		TTL	5,211,711	1	0.043	0.19	0.57
	COMBINED	COMBINED	78,918,437	23	0.24	0.29	0.35
		COMBINED	10,521,722	6	0.37	0.57	0.86
HFPK	26-50	DTL	749,987	2	--	--	--
		HTTL	69,301	0	--	--	--
		LTTL	113,752	0	--	--	--
		SUHL	1,901,614	0	--	--	0.85
		TTL	7,687,068	4	0.30	0.52	0.87
	51-75	COMBINED	53,278,699	11	0.15	0.21	0.28
		ECL	237,612	2	3.5	8.4	18.
		HTTL	13,555,998	2	0.061	0.15	0.32
	76-100	TTL	39,485,089	7	0.12	0.18	0.26
		COMBINED	14,169,179	6	0.28	0.42	0.64
		ECL	33,894	0	--	--	--
	101-125	TTL	14,135,285	6	0.28	0.42	0.64
		COMBINED	948,837	0	--	--	1.7
		TTL	948,837	0	--	--	1.7

TABLE 18: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - AU ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HDIP	COMBINED	COMBINED	20,625,161	20	0.78	0.97	1.2
		COMBINED	13,076,423	13	0.76	0.99	1.3
	26-50	HTTL	30,744	0	--	--	--
		LTTL	169,338	0	--	--	--
		TTL	12,876,341	13	0.77	1.0	1.3
	51-75	COMBINED	7,447,656	7	0.64	0.94	1.4
		HTTL	456,190	0	--	--	--
		LTTL	5,278	0	--	--	--
		TTL	6,986,188	7	0.68	1.0	1.5
	76-100	COMBINED	101,082	0	--	--	--
		TTL	101,082	0	--	--	--
HFPK	COMBINED	COMBINED	29,164,048	1	0.0076	0.034	0.10
		COMBINED	1,189,056	0	--	--	1.4
	26-50	HTTL	5,206	0	--	--	--
		TTL	1,183,850	0	--	--	1.4
	51-75	COMBINED	27,836,316	1	0.0080	0.036	0.11
		DTL	59,568	0	--	--	--
		HTTL	2,343,026	0	--	--	0.69
		TTL	25,433,722	1	0.0088	0.039	0.12
	76-100	COMBINED	138,676	0	--	--	--
		ECL	4,647	0	--	--	--
		TTL	134,029	0	--	--	--

TABLE 18: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - AU ENVIRONMENT (Cont'd)

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
PDIP	COMBINED	COMBINED	60,697	0	--	--	--
	26-50	COMBINED	60,697	0	--	--	--
		TTL	60,697	0	--	--	--

TABLE 19: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - GBC ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% ($F/10^6$ Hours)	λ ($F/10^6$ Hours)	UPPER 80% ($F/10^6$ Hours)
HDIP	COMBINED	COMBINED	44,268,828	4	0.052	0.090	0.15
		COMBINED	42,722,898	4	0.054	0.094	0.16
	26-50	ECL	42,035,400	4	0.055	0.095	0.16
		HTTL	312,660	0	--	--	--
		STTL	253,248	0	--	--	--
		TTL	121,590	0	--	--	--
	51-75	COMBINED	1,285,380	0	--	--	1.3
		ECL	1,285,380	0	--	--	1.3
	76-100	COMBINED	260,550	0	--	--	--
		ECL	260,550	0	--	--	--
HFPK	COMBINED	COMBINED	194,112	0	--	--	--
		COMBINED	194,112	0	--	--	--
	26-50	TTL	194,112	0	--	--	--
		COMBINED	59,059,952	18	0.24	0.30	0.38
	COMBINED	COMBINED	58,981,352	17	0.23	0.29	0.36
		CMOS	153,068	0	--	--	--
PDIP	COMBINED	DTL	191,070	0	--	--	--
		HTTL	153,068	1	--	--	--
	26-50	STTL	20,291,030	14	0.53	0.69	0.89
		LSTTL	24,480,588	0	--	--	0.066
		TTL	13,712,528	2	0.060	0.15	0.31
		COMBINED	78,600	1	--	--	--
	51-75	COMBINED	78,600	1	--	--	--
		TTL	78,600	1	--	--	--
	COMBINED	COMBINED	78,600	1	--	--	--
		TTL	78,600	1	--	--	--

TABLE 20: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - GBM ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j ($^{\circ}\text{C}$)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% ($F/10^6$ Hours)	$\hat{\lambda}$ ($F/10^6$ Hours)	UPPER 80% ($F/10^6$ Hours)
HFPK	<u>COMBINED</u>	<u>COMBINED</u>	54,916,786,170	1049	<u>0.018</u>	<u>0.019</u>	<u>0.020</u>
	51-75	<u>COMBINED</u>	54,916,786,170	1049	<u>0.018</u>	<u>0.019</u>	<u>0.020</u>
		DTL	54,916,786,170	1049	0.018	0.019	0.020

TABLE 21: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - GF ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	$\hat{\lambda}$ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HDIP	COMBINED	COMBINED	267,786,435	13	0.037	0.049	0.064
		COMBINED	243,035,795	13	0.041	0.053	0.070
	26-50	DTL	14,359,486	0	--	--	0.11
		HTTL	4,038,913	0	--	--	0.40
		STTL	3,091,252	0	--	--	0.52
		SUHL	27,985,793	1	0.0080	0.036	0.11
	51-75	TTL	193,560,351	12	0.047	0.062	0.082
		COMBINED	24,750,640	0	--	--	0.065
		TTL	25,750,640	0	--	--	0.065
HFPK	COMBINED	COMBINED	24,920,000	3	0.062	0.12	0.22
		COMBINED	1,670,000	0	--	--	0.96
	26-50	L TTL	1,670,000	0	--	--	0.96
		COMBINED	12,720,000	0	--	--	0.13
		DTL	1,060,000	0	--	--	1.5
		TTL	11,660,000	0	--	--	0.14
	51-75	COMBINED	10,530,000	3	0.15	0.28	0.52
		DTL	8,940,000	2	0.092	0.22	0.48
		TTL	1,590,000	1	0.14	0.63	1.9
PDIP	COMBINED	COMBINED	403,586,552	298	0.70	0.74	0.78
		COMBINED	388,467,552	292	0.71	0.75	0.79
	26-50	CMOS	183,552	0	--	--	--

TABLE 21: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - GF ENVIRONMENT (Cont'd)

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	$\hat{\lambda}$ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
PDIP (Cont'd)		DTL	1,460,000	2	0.56	1.4	2.9
		HTTL	34,570,000	22	0.52	0.64	0.78
		TTL	352,254,000	268	0.72	0.76	0.80
	51-75	COMBINED	14,493,000	6	0.27	0.41	0.63
		TTL	14,493,000	6	0.27	0.41	0.63
	76-100	COMBINED	626,000	0	--	--	2.6
		TTL	626,000	0	--	--	2.6

TABLE 22: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - GF ENVIRONMENT (Cont'd)

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	$\hat{\lambda}$ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
HDIP	COMBINED	COMBINED	5,016,159	0	--	--	0.32
		COMBINED	5,016,159	0	--	--	0.32
	26-50	ECL	691,884	0	--	--	2.3
		TTL	4,324,275	0	--	--	0.37
	COMBINED	COMBINED	240,000,000	67	0.25	0.28	0.31
		COMBINED	240,000,000	67	0.25	0.28	0.31
	51-75	PMOS	240,000,000	67	0.25	0.28	0.31

TABLE 23: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - GT ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶ Hours)	λ (F/10 ⁶ Hours)	UPPER 80% (F/10 ⁶ Hours)
HDIP	COMBINED	COMBINED	44,703,180	0	--	--	0.036
		COMBINED	44,703,180	0	--	--	0.036
	26-50	HTTL	436,600	0	--	--	--
		LTTL	8,716,033	0	--	--	0.18
		STTL	3,445,309	0	--	--	0.47
		TTL	32,105,238	0	--	--	0.050
HFPK	COMBINED	COMBINED	1,486,445	2	0.55	1.3	2.9
		COMBINED	1,417,739	2	0.58	1.4	3.0
	26-50	DTL	5,744	0	--	--	--
		LTTL	381,552	0	--	--	--
		SUHL	967,287	1	0.23	1.0	3.1
		TTL	63,156	1	--	--	--
	51-75	COMBINED	68,706	0	--	--	--
		DTL	9,138	0	--	--	--
		TTL	59,568	0	--	--	--

TABLE 24: SUMMARIZED GENERIC FAILURE RATES (BY PACKAGE TYPE)
FIELD DATA - NSS ENVIRONMENT

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER FAILED	LOWER 20% $(F/10^6 \text{ Hours})$	λ $(F/10^6 \text{ Hours})$	UPPER 80% $(F/10^6 \text{ Hours})$
HDIP	COMBINED	COMBINED	4,599,860	0	--	--	0.35
	26-50	COMBINED	4,275,164	0	--	--	0.38
		TTL	4,275,164	0	--	--	0.38
	51-75	COMBINED	216,464	0	--	--	--
		TTL	216,464	0	--	--	--
	76-100	COMBINED	108,232	0	--	--	--
		ECL	108,232	0	--	--	--
HFPK	COMBINED	COMBINED	268,181,008	0	--	--	0.0060
	26-50	COMBINED	92,646,592	0	--	--	0.017
		TTL	92,646,592	0	--	--	0.017
	51-75	COMBINED	173,099,196	0	--	--	0.0093
		DTL	166,010,000	0	--	--	0.0097
		ECL	108,232	0	--	--	--
		TTL	6,980,964	0	--	--	0.23
	76-100	COMBINED	2,435,220	0	--	--	0.66
		TTL	2,435,220	0	--	--	0.66

TABLE 25: GENERIC FAILURE RATES FIELD DATA

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	$\hat{\lambda}$ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
CMOS	AI	B-1 or JB	HDIP	1-10	51-75	211,680/0	--	--	--
	GBC GF	B-1 or JB	HDIP	11-25	51-75	105,840/0	--	--	--
		X	PDIP	76-100	26-50	153,068/0	--	--	--
		N	PDIP	1-10	26-50	183,552/0	--	--	--
PMOS	AU GM	B-2 to N	HDIP	11-25	51-75	16/0	--	--	--
		N	PDIP	26-50	51-75	240,000,000/67	0.25	0.28	0.31
DTL	AI	B-1	HDIP	11-25	51-75	9,042/0	--	--	--
		B-1	HFPK	1-10	51-75	12,227,330/0	--	--	0.13
		B-1	HFPK	1-10	76-100	8,610/0	--	--	--
		B-1	HFPK	11-25	76-100	8,610/0	--	--	--
	B-2 to N	B-1	HFPK	26-50	76-100	5,740/0	--	--	--
		B-2 to N	HFPK	1-10	26-50	89,401/0	--	--	--
		B-2 to N	HFPK	1-10	51-75	223,074/0	--	--	--
		B-2 to N	HFPK	26-50	51-75	14,970/0	--	--	--
	AIU	B-1	HFPK	1-10	26-50	288,442/0	--	--	--
		C-1	HFPK	1-10	26-50	461,545/2	1.8	4.3	9.3
		B-1	HFPK	1-10	51-75	53,032/0	--	--	--
		B-2 to N	HFPK	1-10	51-75	6,536/0	--	--	--
	GBC GBM GF	N	PDIP	1-10	26-50	191,070/0	--	--	--
		A-1	HFPK	1-10	51-75	54,916,786,170/1049	0.018	0.019	0.020
		B-1	HDIP	1-10	26-50	14,359,486/0	--	--	0.11
		N	HFPK	1-10	51-75	1,060,000/0	--	--	1.5
ECL	GT	N	HFPK	1-10	76-100	4,470,000/0	--	--	0.36
		N	HFPK	11-25	76-100	4,470,000/2	0.18	0.45	0.96
		N	PDIP	1-10	26-50	1,460,000/2	0.56	1.4	2.9
		B-2	HFPK	1-10	26-50	5,744/0	--	--	--
	NSS	B-2	HFPK	26-50	51-75	9,138/0	--	--	--
		C-1	HFPK	1-10	51-75	166,010,000/0	--	--	0.010
	AI AIU	B-1	HFPK	1-10	51-75	4,305/0	--	--	--
		B-1	HFPK	1-10	51-75	3,746/0	--	--	--
		B-1	HFPK	1-10	76-100	11,238/0	--	--	--
		C-1	HFPK	1-10	51-75	233,866/2	3.5	8.6	18.
AU GBC	GBC	C-1	HFPK	1-10	76-100	22,656/0	--	--	--
		B-2 to N	HFPK	1-10	76-100	4,647/0	--	--	--
		N	HDIP	1-10	26-50	27,653,040/1	0.0081	0.036	0.11
		N	HDIP	11-25	26-50	11,915,820/3	0.13	0.25	0.46

TABLE 25: GENERIC FAILURE RATES FIELD DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	λ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
ECL (Cont'd)	GBC	N	HDIP	11-25	51-75	1,146,420/0	--	--	1.4
		N	HDIP	11-25	76-100	260,550/0	--	--	--
		N	HDIP	26-50	26-50	2,466,540/0	--	--	0.65
		N	HDIP	26-50	51-75	138,960/0	--	--	--
		N	HDIP	1-10	26-50	691,884/0	--	--	2.3
	GM NSS	B-1	HDIP	26-50	76-100	108,232/0	--	--	--
		B-1	HFPK	1-10	51-75	108,232/0	--	--	--
		B-1	HDIP	1-10	26-50	4,521/0	--	--	--
		B-1	HDIP	1-10	51-75	11,932/0	--	--	--
		B-1	HDIP	11-25	51-75	13,563/0	--	--	--
HTTL	AI	B-1	HFPK	1-10	51-75	4,004/0	--	--	--
		B-1	HDIP	1-10	26-50	5,206/0	--	--	--
		B-1	HDIP	1-10	51-75	189,589/0	--	--	--
		B-1	HFPK	1-10	26-50	69,301/0	--	--	--
		B-1	HFPK	1-10	51-75	963,162/0	--	--	--
	AIU	B-1	HFPK	11-25	51-75	1,000,964/0	--	--	1.7
		C-1	HFPK	1-10	51-75	10,876,586/2	0.076	0.18	1.6
		C-1	HFPK	11-25	51-75	715,286/0	--	--	0.39
		B-1	HDIP	1-10	26-50	30,744/0	--	--	2.3
		B-1	HDIP	1-10	51-75	30,744/0	--	--	--
	AU	B-1	HFPK	1-10	26-50	5,206/0	--	--	--
		B-1	HFPK	1-10	51-75	1,521,030/0	--	--	1.1
		B-1	HFPK	1-10	51-75	821,996/0	--	--	2.0
		B-2 to N	HDIP	11-25	51-75	421,974/0	--	--	--
		B-2 to N	HDIP	1-10	51-75	3,472/0	--	--	--
	GBC	N	HDIP	1-10	26-50	312,660/0	--	--	--
		X	PDIP	11-25	26-50	153,068/1	--	--	0.43
		B-1	HDIP	1-10	26-50	3,720,145/0	--	--	--
		B-1	HDIP	11-25	26-50	111,409/0	--	--	--
		B-1	HDIP	26-50	26-50	97,448/0	--	--	--
	GF	B-1 or JB	HDIP	1-10	26-50	109,911/0	--	--	--
		N	PDIP	1-10	26-50	34,570,000/22	0.52	0.64	0.78
		B-1	HDIP	1-10	26-50	352,785/0	--	--	--
		B-1	HDIP	11-25	26-50	83,815/0	--	--	--
		B-1	HDIP	11-25	26-50	9,042/0	--	--	--
	GT	B-1	HFPK	1-10	26-50	3,856/0	--	--	--
		B-1	HFPK	11-25	26-50	30,848/0	--	--	--
		B-1	HFPK	26-50	26-50	79,048/0	--	--	--
		B-1	HFPK	26-50	26-50	79,048/0	--	--	--
		B-1	HFPK	26-50	26-50	79,048/0	--	--	--
LTTL	AI	B-1	HDIP	11-25	26-50	9,042/0	--	--	--
		B-1	HFPK	1-10	26-50	3,856/0	--	--	--
	AIU	B-1	HFPK	11-25	26-50	30,848/0	--	--	--
		B-1	HFPK	26-50	26-50	79,048/0	--	--	--

TABLE 25: GENERIC FAILURE RATES FIELD DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	λ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
LTTL (Cont'd)	AU	B-1	HDIP	1-10	26-50	20,496/0	--	--	--
		B-1	HDIP	11-25	26-50	10,248/0	--	--	--
		B-1	HDIP	26-50	26-50	10,248/0	--	--	--
		B-1	HDIP	26-50	26-50	5,278/0	--	--	--
		B-1	HDIP	51-75	26-50	128,346/0	--	--	--
		N	HFPK	1-10	26-50	1,670,000/0	--	--	0.96
		B-1	HDIP	11-25	26-50	1,237,272/0	--	--	1.3
		B-1	HDIP	26-50	26-50	2,410,031/0	--	--	0.67
		B-1	HDIP	51-75	26-50	1,615,002/0	--	--	10.
		JB	HDIP	1-10	26-50	2,908,402/0	--	--	0.55
	GF GT	JB	HDIP	11-25	26-50	505,099/0	--	--	3.2
		JB	HDIP	26-50	26-50	40,227/0	--	--	--
		B-2	HFPK	1-10	26-50	240,129/0	--	--	--
		B-2	HFPK	11-25	26-50	51,468/0	--	--	--
		B-2	HFPK	26-50	26-50	75,595/0	--	--	--
		B-2	HFPK	51-75	26-50	14,360/0	--	--	--
	AI AIU GBC	B-1	HDIP	1-10	26-50	14,915/0	--	--	--
		B-1	HDIP	11-25	51-75	35,918/0	--	--	--
		B-1	HDIP	1-10	26-50	369,614/0	--	--	--
		N	HDIP	26-50	26-50	253,248/0	--	--	--
		N	PDIP	1-10	26-50	3,879,264/0	--	--	0.41
		N	PDIP	11-25	26-50	6,131,898/1	0.036	0.16	0.49
		N	PDIP	26-50	26-50	1,641,240/2	0.50	1.2	2.6
		N	PDIP	51-75	26-50	2,584,776/10	2.8	3.9	5.3
		X	PDIP	1-10	26-50	2,943,260/0	--	--	0.55
		X	PDIP	11-25	26-50	2,957,524/1	0.075	0.39	1.2
STTL	GF	X	PDIP	26-50	26-50	153,068/0	--	--	--
		B-1	HDIP	1-10	26-50	1,454,320/0	--	--	1.1
		B-1	HDIP	11-25	26-50	593,116/0	--	--	2.7
		B-1	HDIP	26-50	26-50	25,241/0	--	--	--
		B-1 or JB	HDIP	1-10	26-50	364,873/0	--	--	--
		B-1 or JB	HDIP	11-25	26-50	225,251/0	--	--	--
		B-1 or JB	HDIP	26-50	26-50	417,907/0	--	--	--
		N	HDIP	1-10	26-50	320/0	--	--	--
		N	HDIP	11-25	26-50	10,224/0	--	--	--
		B-1	HDIP	1-10	26-50	2,316,291/0	--	--	0.69
	GT	B-1	HDIP	11-25	26-50	771,290/0	--	--	2.1
		B-1	HDIP	51-75	26-50	357,728/0	--	--	--

TABLE 25: GENERIC FAILURE RATES FIELD DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _J (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	λ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
LSTTL	GBC	N	PDIP	1-10	26-50	436,464/0	--	--	--
		N	PDIP	26-50	26-50	16,632/0	--	--	--
		X	PDIP	1-10	26-50	851,652/0	--	--	1.9
		X	PDIP	11-25	26-50	6,975,840/0	--	--	0.23
		X	PDIP	26-50	26-50	10,800,000/0	--	--	0.15
SUHL	AI	X	PDIP	51-75	26-50	5,400,000/0	--	--	0.30
		B-1	HFPK	1-10	51-75	66,010/0	--	--	--
		B-1	HFPK	11-25	51-75	21,226/0	--	--	--
		C-1	HFPK	1-10	26-50	785,070/0	--	--	2.1
		C-1	HFPK	11-25	26-50	1,116,544/0	--	--	1.4
		B-1	HDIP	1-10	26-50	19,996,409/1	0.011	0.050	0.15
		B-1	HDIP	11-25	26-50	7,989,384/0	--	--	0.20
		B-2	HFPK	1-10	26-50	909,877/1	0.25	1.1	3.3
		B-2	HFPK	11-25	26-50	57,410/0	--	--	--
TTL	AI	B-1	HDIP	1-10	26-50	551,917/0	--	--	2.9
		B-1	HDIP	1-10	51-75	105,546/0	--	--	--
		B-1	HDIP	11-25	26-50	100,624/0	--	--	--
		B-1	HDIP	11-25	51-75	313,445/0	--	--	--
		B-1	HDIP	26-50	51-75	101,608/0	--	--	--
		B-1	HDIP	51-75	51-75	122,146/0	--	--	--
		B-1	HFPK	1-10	26-50	242,323/0	--	--	--
		B-1	HFPK	1-10	51-75	644,783/0	--	--	2.5
		B-1	HFPK	11-25	26-50	34,570/0	--	--	--
		B-1	HFPK	11-25	51-75	46,554/0	--	--	--
		B-1	HFPK	26-50	51-75	10,248/0	--	--	--
		B-1	HFPK	26-50	76-100	10,012/0	--	--	--
		B-1	HFPK	26-50	101-125	17,220/0	--	--	--
		B-1	HFPK	51-75	76-100	17,220/0	--	--	--
		B-2	HFPK	1-10	51-75	75,070,000/12	0.12	0.16	0.21
		B-2	HFPK	11-25	51-75	42,740,000/1	0.0052	0.023	0.070
		B-2	HFPK	51-75	76-100	1,690,000/1	0.13	0.59	1.8
		B-2 to N	HDIP	1-10	51-75	82,371/0	--	--	--
		B-2 to N	HDIP	11-25	51-75	14,853/0	--	--	--
		B-2 to N	HFPK	1-10	51-75	5,792/0	--	--	--
		B-2 to N	HFPK	11-25	51-75	5,792/0	--	--	--
		B-2 to N	HFPK	51-75	76-100	7,525/0	--	--	--

TABLE 25: GENERIC FAILURE RATES FIELD DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	$\hat{\lambda}$ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)	
TTL (Cont'd)	AI	N	HDIP	1-10	26-50	25,220/0	--	--	--	
			HDIP	11-25	51-75	7,170/0	--	--	--	
			HFPK	1-10	51-75	2,010/0	--	--	--	
			HFPK	11-25	51-75	2,010/0	--	--	--	
			HFPK	51-75	51-75	4,950/0	--	--	--	
			HDIP	1-10	26-50	14,286,636/0	--	--	0.11	
			HDIP	11-25	26-50	1,834,690/0	--	--	0.88	
			HDIP	11-25	51-75	4,272,840/1	0.052	0.23	0.70	
			HDIP	26-50	51-75	860,861/0	--	--	1.9	
			HDIP	51-75	51-75	27,106/0	--	--	--	
			HFPK	1-10	26-50	3,686,590/4	0.62	1.1	1.8	
			HFPK	11-25	51-75	210,320/0	--	--	--	
	AIU		HFPK	11-25	26-50	74,920/0	--	--	--	
			HFPK	11-25	51-75	1,874,152/0	--	--	0.86	
			HFPK	11-25	76-100	89,904/0	--	--	--	
			HFPK	26-50	51-75	7,602/0	--	--	--	
			HFPK	26-50	76-100	559,086/0	--	--	2.9	
			HFPK	26-50	101-125	458,885/0	--	--	--	
			HFPK	51-75	76-100	689,264/1	0.32	1.4	4.3	
			HDIP	11-25	51-75	50,904/0	--	--	--	
			HFPK	1-10	26-50	3,848,301/0	--	--	0.42	
			HFPK	1-10	51-75	15,057,418/3	0.10	0.20	0.37	
			HFPK	11-25	26-50	77,257/0	--	--	--	
			HFPK	11-25	51-75	18,429,443/4	0.12	0.22	0.36	
	AU		HFPK	11-25	76-100	127,725/0	--	--	--	
			HFPK	26-50	51-75	3,906,154/0	--	--	0.41	
			HFPK	26-50	76-100	535,486/0	--	--	3.0	
			HFPK	51-75	76-100	12,133,820/5	0.25	0.41	0.65	
			HFPK	51-75	101-125	489,952/0	--	--	--	
			HDIP	1-10	26-50	2,745,503/0	--	--	0.59	
			HDIP	1-10	51-75	519,288/0	--	--	3.1	
			HDIP	11-25	26-50	747,274/0	--	--	2.1	
			HDIP	11-25	51-75	1,006,887/0	--	--	1.6	
			HDIP	26-50	51-75	1,367,072/0	--	--	1.2	
			HDIP	51-75	51-75	210,319/0	--	--	--	
			HDIP	76-100	76-100	101,082/0	--	--	--	
		B-1	HFPK	1-10	26-50	1,183,850/0	--	--	1.4	
			HFPK	1-10	51-75	17,582,535/1	0.013	0.057	0.17	
			HFPK	1-10	76-100	53,336/0	--	--	--	
			HFPK	11-25	51-75	3,518,077/0	--	--	0.46	

TABLE 25: GENERIC FAILURE RATES FIELD DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	λ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
TTL (Cont'd)	AU	B-1	HFPK	26-50	51-75	1,702,230/0	--	--	0.95
		B-1	HFPK	26-50	76-100	80,693/0	--	--	--
		B-1	HFPK	51-75	51-75	589,698/0	--	--	2.7
		B-1	HFPK	11-25	26-50	60,697/0	--	--	--
		B-2 to N	HDIP	1-10	26-50	8,794,228/13	1.1	1.5	1.9
		B-2 to N	HDIP	11-25	26-50	589,336/0	--	--	2.7
		B-2 to N	HDIP	11-25	51-75	1,723,616/2	0.48	1.2	2.5
		B-2 to N	HDIP	26-50	51-75	977,947/4	2.3	4.1	6.9
		B-2 to N	HDIP	51-75	51-75	1,181,059/1	0.19	0.85	2.5
		C-1	HFPK	51-75	51-75	2,041,182/0	--	--	0.79
GBC	GBC	N	HDIP	1-10	26-50	121,590/0	--	--	--
		N	PDIP	1-10	26-50	3,453,912/0	--	--	0.47
		N	PDIP	11-25	26-50	2,192,448/2	0.38	0.91	2.0
		N	PDIP	26-50	26-50	270,984/0	--	--	--
		N	PDIP	51-75	51-75	78,600/1	--	--	--
		N	PDIP	26-50	26-50	627,792/0	--	--	2.6
		X	HFPK	1-10	26-50	194,112/0	--	--	--
		X	PDIP	1-10	26-50	2,069,400/0	--	--	0.78
		X	PDIP	11-25	26-50	4,845,756/0	--	--	0.66
		X	PDIP	26-50	26-50	99,168/0	--	--	--
GF	GF	X	PDIP	51-75	26-50	153,068/0	--	--	--
		B-1	HDIP	1-10	26-50	9,316,022/0	--	--	0.17
		B-1	HDIP	11-25	26-50	74,688,530/1	0.0030	0.013	0.040
		B-1	HDIP	26-50	26-50	5,860,555/0	--	--	0.27
		B-1	HDIP	26-50	51-75	6,357,862/0	--	--	0.25
		B-1	HDIP	51-75	26-50	6,168,035/0	--	--	0.26
		B-1	HDIP	51-75	51-75	16,514,778/0	--	--	0.097
		B-1 or JB	HDIP	1-10	26-50	998,089/0	--	--	1.6
		B-1 or JB	HDIP	11-25	26-50	457,848/0	--	--	--
		B-1 or JB	HDIP	26-50	26-50	178,602/0	--	--	--
JB	JB	B-1 or JB	HDIP	51-75	26-50	67,096/0	--	--	--
		B-1 or JB	HDIP	1-10	26-50	49,353,810/1	0.0045	0.020	0.061
		B-1 or JB	HDIP	11-25	26-50	16,498,680/0	--	--	0.098
		B-1 or JB	HDIP	51-75	26-50	1,536,084/0	--	--	1.0
		N	HDIP	1-10	26-50	28,437,000/10	0.26	0.35	0.48
		N	HDIP	11-25	51-75	1,878,000/0	--	--	0.86
		N	HFPK	1-10	51-75	6,890,000/0	--	--	0.23
		N	HFPK	1-10	76-100	1,590,000/1	0.14	0.63	1.9
		N	HFPK	11-25	51-75	4,770,000/0	--	--	0.34
		N	PDIP	1-10	26-50	279,309,000/206	0.69	0.74	0.78

TABLE 25: GENERIC FAILURE RATES FIELD DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶ HOURS)	$\hat{\lambda}$ (F/10 ⁶ HOURS)	UPPER 80% (F/10 ⁶ HOURS)
TTL (Cont'd)	GF	N	PDIP	11-25	26-50	71,975,000/62	0.77	0.86	0.97
		N	PDIP	11-25	51-75	3,344,000/4	0.69	1.2	2.0
		N	PDIP	26-50	26-50	970,000/0	--	--	1.7
		N	PDIP	26-50	51-75	11,149,000/2	0.074	0.18	0.38
		N	PDIP	26-50	76-100	626,000/0	--	--	2.6
		N	HDIP	1-10	26-50	2,594,565/0	--	--	0.62
		N	HDIP	11-25	26-50	1,210,797/0	--	--	1.3
		N	HDIP	26-50	26-50	518,913/0	--	--	3.1
		B-1	HDIP	1-10	26-50	5,237,057/0	--	--	0.31
		B-1	HDIP	11-25	26-50	3,899,946/0	--	--	0.41
	GM	B-1	HDIP	26-50	26-50	2,290,477/0	--	--	0.70
		B-1	HDIP	51-75	26-50	317,686/0	--	--	--
		JB	HDIP	1-10	26-50	12,451,275/0	--	--	0.13
		JB	HDIP	11-25	26-50	5,604,741/0	--	--	0.29
		JB	HDIP	26-50	26-50	1,361,406/0	--	--	1.2
		JB	HDIP	51-75	26-50	934,034/0	--	--	1.7
		JB	HFPK	26-50	26-50	36,564/0	--	--	--
		B-2	HDIP	11-25	26-50	8,616/0	--	--	--
		B-2	HFPK	11-25	26-50	26,592/1	--	--	--
		B-2	HFPK	11-25	51-75	17,232/0	--	--	--
	NSS	B-2	HFPK	26-50	51-75	8,616/0	--	--	--
		B-2	HFPK	51-75	51-75	33,720/0	--	--	--
		B-1	HDIP	1-10	26-50	3,084,612/0	--	--	0.52
		B-1	HDIP	11-25	26-50	1,190,552/0	--	--	1.3
		B-1	HDIP	11-25	51-75	216,464/0	--	--	--
		B-1	HFPK	1-10	26-50	74,409,500/0	--	--	0.022
		B-1	HFPK	11-25	26-50	18,237,092/0	--	--	C.088
		B-1	HFPK	11-25	51-75	2,381,104/0	--	--	0.68
		B-1	HFPK	26-50	51-75	4,599,860/0	--	--	0.35
		B-1	HFPK	26-50	76-100	54,116/0	--	--	--
		B-1	HFPK	51-75	76-100	2,381,104/0	--	--	0.68

DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES

The presentation of data within this subsection is designed to serve as a means of comparison between the device failure rates predicted using MIL-HDBK-217B and those failure rates which have been observed through actual field experience. The information for the four tables included herein (Tables 26 through 29) and their associated graphs (Figures 1 through 16) represent those data entries from Table 25, "Generic Failure Rates - Field Data," where, once again, the following minimum criteria for the calculation of failure rates has been met:

- 0 failures with \geq 500,000 accumulated part hours
- 1 failure with \geq 250,000 accumulated part hours
- 2 failures with \geq 125,000 accumulated part hours

This data population, comprised of 126 line entries, is subsequently grouped and presented by environment (Table 26), screen class (Table 27), gate complexity (Table 28), and junction temperature (Table 29) to yield a maximum of 504 entry numbers used in the generation of the sixteen observed and MIL-HDBK-217B predicted failure rate graphs displayed within this subsection. This format was adopted to allow greater visibility into the secondary influences exerted within each of the four major categories defined above, as well as to prevent an overcrowding of data onto any one figure. For example, the 87 relevant entries from Table 26 have been illustrated using three figures, specifying three distinct environmental categories. It should be noted at this point that not all of the assigned entry numbers are represented on these graphs. Certain data groupings were found to be irrelevant due to insufficient data or inconclusive results and, hence, were not plotted. Further information on these data may be obtained by contacting the Reliability Analysis Center directly. The following index is provided to ease referencing between Entry Numbers, Table Numbers, and Figure Numbers:

<u>Entry Numbers</u>	<u>Table Number</u>	<u>Figure Number</u>
1-27	26	1
28-45	26	*
46-65	26	*
66-98	26	2
99-126	26	3
128-139	27	*
140-159	27	*
160-179	27	*
180-198	27	*
199-211	27	4
212-244	27	5
245-252	27	6
253-278	28	*
279-304	28	7
305-318	28	8
319-342	28	9
343-363	28	10
364-378	28	*
379-398	29	11
399-423	29	12
424-433	29	*
434-453	29	13
454-465	29	*
466-491	29	14
492-494	29	15
495-504	29	16

* not represented on a graph due to insufficient data or inconclusive results

In reviewing this series of observed and predicted failure rate plots, the reader is reminded that the area above the "observed failure rate = predicted failure rate" reference line represents all those conditions where the observed field failure rate exceeds the value of the theoretical predicted failure rate. Conversely, the region beneath the reference line indicates a

predicted failure rate that is greater than the observed failure rate.

In regards to the calculations of the predicted device failure rates per MIL-HDBK-217B, the following guidelines were established:

1. The Notice 2 version of the handbook was utilized
2. π_L and π_P were used, as applicable
3. Environments (π_E):

AIU (where an equipment may have Line Replaceable Units (LRUs) in an inhabitable or uninhabitable airborne environment, but the reported data are not distinguishable) used the π_E value for AI environments

GT (where an equipment operates in a ground, fixed condition, but is transportable by vehicle) used the π_E value for GF environments

GBC or GBM used the π_E value for GB environments

4. Screen Class (π_Q):

"B-1 or JB" (where either screen class may have been used) used the π_Q value of screen class B

"B-2 to N" (where the quality level reflects the variable procurement practices of the data source) used the π_Q value of screen class B-2

JB used the π_Q value of screen class B

X used the π_Q value of screen class N

5. Gate Complexity (C_1, C_2):

For complexities of 1-10 gates, used C_1 and C_2 values for complexity = 1 gate

For complexities of 11-25 gates, used C_1 and C_2 values for complexity = 11 gates

For complexities of 26-50 gates, used C_1 and C_2 values for complexity = 26 gates

For complexities of 51-75 gates, used C_1 and C_2 values for complexity = 51 gates

For complexities of 76-100 gates, used C_1 and C_2 values for complexity = 76 gates

6. Temperature Factor (π_T):

For junction temperatures of 26-50°C, used π_T values
for $T_J = 26^\circ\text{C}$

For junction temperatures of 51-75°C, used π_T values
for $T_J = 51^\circ\text{C}$

For junction temperatures of 76-100°C, used π_T values
for $T_J = 76^\circ\text{C}$

Junction temperatures for the devices were calculated using the
formula:

$$T_J = T_A + P_{TYP} \theta_{JA}$$

where:

T_J = junction temperature ($^\circ\text{C}$)

T_A = ambient temperature ($^\circ\text{C}$)

P_{TYP} = typical operating power dissipation

θ_{JA} = junction-to-ambient thermal resistance ($^\circ\text{C}/\text{W}$)

θ_{JA} was assumed to be 100°C/Watt for Hermetic and
Plastic DIPs and 150°C/Watt for Hermetic Flat
Packages

The application of these six criteria to the prediction methodology of MIL-HDBK-217B results in the most optimistic predicted device failure rate values for each specified set of electrical and environmental conditions, such that comparisons to actual observed field data should emphasize those conditions where the predicted failure rate exceeds the observed failure rate. Any significant trends pertaining to those points which are located below the "observed-predicted" reference line on each of the figures will also become evident.

In addition to the establishment of the aforementioned prediction guidelines, it was necessary to assume that the observed field failure rates were constant, thus lending validity to including in the analysis of relevant trends those zero failure data entries that fell into the "predicted > observed" region. The reader is cautioned, however, that actual field failure rates may not be constant, opening up the possibility that additional accumulated data may, when analyzed, effect a change in the complexion of these graphs and, subsequently, altering what may presently appear to be

valid conclusions. Secondly, the reader is reminded that, due to the optimization of the prediction model parameters to present the best results for a given range of conditions, any alteration in these parameters to reflect a more probable average gate complexity or average junction temperature for each generic device category will cause a vertically downward shift of the plotted data entries. This action will most likely increase the percentage of points within the "predicted > observed" territory.

ANALYSIS

Of the 126 original data entries used to generate Tables 26 through 29 and, finally, Figures 1 through 16, devices with screen class levels of C-1 or lower are represented by 54 of these points. The distribution of points within this population shows that 32 entries would be located in the "predicted > observed" region, 6 entries are coincident with the "predicted = observed" reference line, and the remaining 16 points exhibit the "observed > predicted" condition. In this latter case, however, 13 of those 16 points represent zero failure entries, where only the 80% confidence limit is calculated, thus preventing the determination of a supportively conclusive result without either an additional accumulation of data or the occurrence of a verified failure. Disregarding these points, then, leads us to the result that out of the remaining 39 points having a screen class of C-1 or lower, 82% have predicted values greater than those achieved in the field. Careful analysis and comparisons between the supplied observed and predicted failure rate plots indicate that this condition persists regardless of field environment* (Figures 1 through 6), gate complexity (Figures 7 through 19) and junction temperature (Figures 11 through 16). Additional observation reveals that the package type (Figures 11 through 15 especially) and device operational type (all figures) do not appear to alter the outcome. This is not to say that these parameters have no influence on the presented results, only that their degree of influence is indeterminable at this time.

*It should be noted that Screen Class C-1 is almost exclusively applicable to airborne environments, while Screen Class N and X are found in the ground environments.

Beyond this analysis and reverting back to the original 126 data entries, it can be seen that only eight points which fell into the "observed > predicted" region actually experienced verified failures. The generic characteristics of these line entries are listed below:

Operational Type	Screen Class	Gate Complexity	Junction Temp. (°C)	Package Type	Env.
DTL	A-1	1-10	51-75	HFPK	GBM
DTL	C-1	1-10	26-50	HFPK	AIU
ECL	C-1	1-10	51-75	HFPK	AIU
STTL	N	51-75	26-50	PDIP	GBC
SUHL	B-2	1-10	26-50	HFPK	GT
TTL	B-1	1-10	26-50	HFPK	AIU
TTL	B-2 to N	1-10	26-50	HDIP	AU
TTL	B-2 to N	26-50	51-75	HDIP	AU

Due to the small number of data points involved and the lack of inherent consistency between the entry parameters, it is impossible to identify a qualifying factor as to why these points should fall into the "observed > predicted" category. Except for the Screen Class A-1 entry, ample evidence exists among the remaining 118 points to substantially dispute any general conclusions made about these outliers.

For the reader's general information, the following distribution is provided:

Original number of points:	126
Observed > Predicted points:	8 (6.3%) (excluding zero failure data)
Observed = Predicted points:	18 (14.3%) (including zero failure data)
Predicted > Observed points:	36 (28.6%) (including zero failure data)
Undetermined	: 64 (50.8%) (observed > predicted zero failure data)

TABLE 26: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY ENVIRONMENT)

ENTRY NUMBER	ENVIRONMENT	OP TYPE	SCREEN CLASS	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
1	AI	DTL	B-1	1-10	51-75	HFPK	12,227,330	0	--	--	0.13	0.080
2	AI	TTL	B-1	1-10	26-50	HDIP	551,917	0	--	--	2.9	0.079
3	AI	TTL	B-1	1-10	51-75	HFPK	644,783	0	--	--	2.5	0.080
4	AI	TTL	B-2	1-10	51-75	HFPK	75,070,000	12	0.12	0.16	0.21	0.16
5	AI	TTL	B-2	11-25	51-75	HFPK	42,740,000	1	0.0052	0.023	0.070	0.39
6	AI	TTL	B-2	51-75	76-100	HFPK	1,690,000	1	0.13	0.59	1.8	0.83
7	AIU	DTL	C-1	1-10	26-50	HFPK	461,545	2	1.8	4.3	9.3	1.4
8	AIU	ECL	C-1	1-10	51-75	HFPK	233,866	2	3.5	8.6	18.	1.5
9	AIU	HTTL	B-1	1-10	51-75	HFPK	963,162	0	--	--	1.7	0.080
10	AIU	HTTL	B-1	11-25	51-75	HFPK	1,000,964	0	--	--	1.6	0.20
11	AIU	HTTL	C-1	1-10	51-75	HFPK	10,876,586	2	0.076	0.18	0.39	1.4
12	AIU	SUHL	C-1	1-10	26-50	HFPK	785,070	0	--	--	2.1	1.4
13	AIU	SUHL	C-1	11-25	26-50	HFPK	1,116,544	0	--	--	1.4	3.4
14	AIU	TTL	B-1	1-10	26-50	HDIP	14,286,636	0	--	--	0.11	0.079
15	AIU	TTL	B-1	11-25	26-50	HDIP	1,834,690	0	--	--	0.88	0.19
16	AIU	TTL	B-1	11-25	51-75	HDIP	4,272,840	1	0.052	0.23	0.70	0.20
17	AIU	TTL	B-1	26-50	51-75	HDIP	860,861	0	--	--	1.9	0.28
18	AIU	TTL	B-1	1-10	26-50	HFPK	3,686,590	4	0.62	1.1	1.8	0.079
19	AIU	TTL	B-1	11-25	51-75	HFPK	1,874,152	0	--	--	0.86	0.20
20	AIU	TTL	B-1	26-50	76-100	HFPK	559,086	0	--	--	2.9	0.32
21	AIU	TTL	B-1	51-75	76-100	HFPK	689,264	1	0.32	1.4	4.3	0.42
22	AIU	TTL	C-1	1-10	26-50	HFPK	3,848,301	0	--	--	0.42	1.4
23	AIU	TTL	C-1	1-10	51-75	HFPK	15,057,418	3	0.10	0.20	0.37	1.4
24	AIU	TTL	C-1	11-25	51-75	HFPK	18,429,443	4	0.12	0.22	0.36	3.5
25	AIU	TTL	C-1	26-50	51-75	HFPK	3,906,154	0	--	--	0.41	5.1
26	AIU	TTL	C-1	26-50	76-100	HFPK	535,486	0	--	--	3.0	5.8
27	AIU	TTL	C-1	51-75	76-100	HFPK	12,133,820	5	0.25	0.41	0.65	7.5
28	AU	HTTL	B-1	1-10	51-75	HFPK	1,521,030	0	--	--	1.1	0.12
29	AU	HTTL	B-1	11-25	51-75	HFPK	821,996	0	--	--	2.0	0.29
30	AU	TTL	B-1	1-10	26-50	HDIP	2,745,503	0	--	--	0.59	0.12
31	AU	TTL	B-1	1-10	51-75	HDIP	519,288	0	--	--	3.1	0.12
32	AU	TTL	B-1	11-25	26-50	HDIP	747,274	0	--	--	2.1	0.28
33	AU	TTL	B-1	11-25	51-75	HDIP	1,006,887	0	--	--	1.6	0.29
34	AU	TTL	B-1	26-50	51-75	HDIP	1,367,072	0	--	--	1.2	0.41
35	AU	TTL	B-1	1-10	26-50	HFPK	1,183,850	0	--	--	1.4	0.12

TABLE 26: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES

(GROUPED BY ENVIRONMENT) (Cont'd)

ENTRY NUMBER	ENVIRONMENT	OP TYPE	SCREEN CLASS	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
36	AU	TTL	B-1	1-10	51-75	HFPK	17,582,535	1	0.013	0.057	0.17	0.12
37	AU	TTL	B-1	11-25	51-75	HFPK	3,518,077	0	--	--	0.46	0.29
38	AU	TTL	B-1	26-50	51-75	HFPK	1,702,230	0	--	--	0.95	0.41
39	AU	TTL	B-1	51-75	51-75	HFPK	589,698	0	--	--	2.7	0.51
40	AU	TTL	B-2 to N	1-10	26-50	HDIP	8,794,228	13	1.1	1.5	1.9	0.24
41	AU	TTL	B-2 to N	11-25	26-50	HDIP	589,336	0	--	--	2.7	0.56
42	AU	TTL	B-2 to N	11-25	51-75	HDIP	1,723,616	2	0.48	1.2	2.5	0.58
43	AU	TTL	B-2 to N	26-50	51-75	HDIP	977,947	4	2.3	4.1	6.9	0.82
44	AU	TTL	B-2 to N	51-75	51-75	HDIP	1,181,059	1	0.19	0.85	2.5	1.0
45	AU	TTL	C-1	51-75	51-75	HFPK	2,041,182	0	--	--	0.79	9.2
46	GBC	ECL	N	1-10	26-50	HDIP	27,653,040	1	0.0081	0.036	0.11	0.14
47	GBC	ECL	N	11-25	26-50	HDIP	11,915,820	3	0.13	0.25	0.46	0.38
48	GBC	ECL	N	11-25	51-75	HDIP	1,146,420	0	--	--	1.4	1.1
49	GBC	ECL	N	26-50	26-50	HDIP	2,466,540	0	--	--	0.65	0.59
50	GBC	STTL	N	1-10	26-50	PDIP	3,879,264	0	--	--	0.41	0.27
51	GBC	STTL	N	11-25	26-50	PDIP	6,131,898	1	0.036	0.16	0.49	0.76
52	GBC	STTL	N	26-50	26-50	PDIP	1,641,240	2	0.50	1.2	2.6	1.2
53	GBC	STTL	N	51-75	26-50	PDIP	2,584,776	10	2.8	3.9	5.3	1.5
54	GBC	STTL	X	1-10	26-50	PDIP	2,943,260	0	--	--	0.55	0.27
55	GBC	STTL	X	11-25	26-50	PDIP	2,957,524	1	0.075	0.39	1.2	0.76
56	GBC	LSTTL	X	1-10	26-50	PDIP	851,652	0	--	--	1.9	0.27
57	GBC	LSTTL	X	11-25	26-50	PDIP	6,975,840	0	--	--	0.23	0.76
58	GBC	LSTTL	X	26-50	26-50	PDIP	10,800,000	0	--	--	0.15	1.2
59	GBC	LSTTL	X	51-75	26-50	PDIP	5,400,000	0	--	--	0.30	1.5
60	GBC	TTL	N	1-10	26-50	PDIP	3,453,912	0	--	--	0.47	0.27
61	GBC	TTL	N	11-25	26-50	PDIP	2,192,448	2	0.38	0.91	2.0	0.76
62	GBC	TTL	N	51-75	26-50	PDIP	627,792	0	--	--	2.6	1.5
63	GBC	TTL	X	1-10	26-50	PDIP	2,069,400	0	--	--	0.78	0.27
64	GBC	TTL	X	11-25	26-50	PDIP	4,845,756	0	--	--	0.66	0.76
65	GBM	DTL	A-1	1-10	51-75	HFPK	54,916,786,170	1049	0.018	0.019	0.020	0.0012
66	GF	DTL	B-1	1-10	26-50	HDIP	14,359,486	0	--	--	0.11	0.020
67	GF	DTL	N	1-10	51-75	HFPK	1,060,000	0	--	--	1.5	0.66
68	GF	DTL	N	1-10	76-100	HFPK	4,470,000	0	--	--	0.36	0.79
69	GF	DTL	N	11-25	76-100	HFPK	4,470,000	2	0.18	0.45	0.96	2.4
70	GF	DTL	N	1-10	26-50	PDIP	1,460,000	2	0.56	1.4	2.9	1.2

TABLE 26: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY ENVIRONMENT) (Cont'd)

ENTRY NUMBER	ENVIRONMENT	OP TYPE	SCREEN CLASS	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
71	GF	HTTL	B-1	1-10	26-50	HDIP	3,720,145	0	--	--	0.43	0.020
72	GF	HTTL	N	1-10	26-50	PDIP	34,570,000	22	0.52	0.64	0.78	1.2
73	GF	L TTL	N	1-10	26-50	HFPK	1,670,000	0	--	--	0.96	0.61
74	GF	STTL	B-1	1-10	26-50	HDIP	1,454,320	0	--	--	1.1	0.020
75	GF	STTL	B-1	11-25	26-50	HDIP	593,116	0	--	--	2.7	0.049
76	GF	SUHL	B-1	1-10	26-50	HDIP	19,996,409	1	0.011	0.050	0.15	0.020
77	GF	SUHL	B-1	11-25	26-50	HDIP	7,989,384	0	--	--	0.20	0.049
78	GF	TTL	B-1	1-10	26-50	HDIP	9,316,022	0	--	--	0.17	0.020
79	GF	TTL	B-1	11-25	26-50	HDIP	74,688,530	1	0.0030	0.013	0.040	0.049
80	GF	TTL	B-1	26-50	26-50	HDIP	5,860,555	0	--	--	0.27	0.071
81	GF	TTL	B-1	26-50	51-75	HDIP	6,357,862	0	--	--	0.25	0.087
82	GF	TTL	B-1	51-75	26-50	HDIP	6,168,035	0	--	--	0.26	0.090
83	GF	TTL	B-1	51-75	51-75	HDIP	16,514,778	0	--	--	0.097	0.11
84	GF	TTL	B-1 or JB	1-10	26-50	HDIP	998,089	0	--	--	1.6	0.0081
85	GF	TTL	JB	1-10	26-50	HDIP	49,353,810	1	0.0045	0.020	0.061	0.0081
86	GF	TTL	JB	11-25	26-50	HDIP	16,498,680	0	--	--	0.098	0.020
87	GF	TTL	JB	51-75	26-50	HDIP	1,536,084	0	--	--	1.0	0.036
88	GF	TTL	N	1-10	26-50	HDIP	28,437,000	10	0.26	0.35	0.48	0.61
89	GF	TTL	N	11-25	51-75	HFPK	1,878,000	0	--	--	0.86	1.7
90	GF	TTL	N	1-10	51-75	HFPK	6,890,000	0	--	--	0.23	0.66
91	GF	TTL	N	1-10	76-100	HFPK	1,590,000	1	0.14	0.63	1.9	0.79
92	GF	TTL	N	11-25	51-75	HFPK	4,770,000	0	--	--	0.34	1.7
93	GF	TTL	N	1-10	26-50	PDIP	279,309,000	206	0.69	0.74	0.78	1.2
94	GF	TTL	N	11-25	26-50	PDIP	71,975,000	62	0.77	0.86	0.97	3.0
95	GF	TTL	N	11-25	26-50	PDIP	3,344,000	4	0.69	1.2	2.0	3.5
96	GF	TTL	N	26-50	50	PDIP	970,000	0	--	--	1.7	4.3
97	GF	TTL	N	26-50	51-75	PDIP	11,149,000	2	0.074	0.18	0.38	5.2
98	GF	TTL	N	26-50	76-100	PDIP	626,000	0	--	--	2.6	7.7
99	GM	PMOS	N	26-50	51-75	PDIP	240,000,000	67	0.25	0.28	0.31	19.
100	GM	ECL	N	1-10	26-50	HDIP	691,884	0	--	--	2.3	2.4
101	GM	TTL	N	1-10	26-50	HDIP	2,594,565	0	--	--	0.62	2.4
102	GM	TTL	N	11-25	26-50	HDIP	1,210,797	0	--	--	1.3	5.6
103	GM	TTL	N	26-50	26-50	HDIP	518,913	0	--	--	3.1	8.0
104	GT	L TTL	B-1	11-25	26-50	HDIP	1,237,272	0	--	--	1.3	0.049
105	GT	L TTL	B-1	26-50	26-50	HDIP	2,410,031	0	--	--	0.67	0.071
106	GT	L TTL	B-1	51-75	26-50	HDIP	1,615,002	0	--	--	1.0	0.090

TABLE 26: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY ENVIRONMENT) (Cont'd)

ENTRY NUMBER	ENVIRONMENT	OP TYPE	SCREEN CLASS	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
107	GT	L TTL	JB	1-10	26-50	HDIP	2,908,402	0	--	--	0.55	0.0081
108	GT	L TTL	JB	11-25	26-50	HDIP	505,099	0	--	--	3.2	0.020
109	GT	S TTL	B-1	1-10	26-50	HDIP	2,316,291	0	--	--	0.69	0.020
110	GT	S TTL	B-1	11-25	26-50	HDIP	771,290	0	--	--	2.1	0.049
111	GT	SUHL	B-2	1-10	26-50	HFPK	909,877	1	0.25	1.1	3.3	0.040
112	GT	TTL	B-1	1-10	26-50	HDIP	5,237,057	0	--	--	0.31	0.020
113	GT	TTL	B-1	11-25	26-50	HDIP	3,899,946	0	--	--	0.41	0.049
114	GT	TTL	B-1	26-50	26-50	HDIP	2,290,477	0	--	--	0.70	0.071
115	GT	TTL	JB	1-10	26-50	HDIP	12,451,275	0	--	--	0.13	0.0081
116	GT	TTL	JB	11-25	26-50	HDIP	5,604,741	0	--	--	0.29	0.020
117	GT	TTL	JB	26-50	26-50	HDIP	1,361,406	0	--	--	1.2	0.029
118	GT	TTL	JB	51-75	26-50	HDIP	934,034	0	--	--	1.7	0.036
119	NSS	DTL	C-1	1-10	51-75	HFPK	166,010,000	0	--	--	0.010	1.4
120	NSS	TTL	B-1	1-10	26-50	HDIP	3,084,612	0	--	--	0.52	0.079
121	NSS	TTL	B-1	11-25	26-50	HDIP	1,190,552	0	--	--	1.3	0.19
122	NSS	TTL	B-1	1-10	26-50	HFPK	74,409,500	0	--	--	0.022	0.079
123	NSS	TTL	B-1	11-25	26-50	HFPK	18,237,092	0	--	--	0.088	0.19
124	NSS	TTL	B-1	11-25	51-75	HFPK	2,381,104	0	--	--	0.68	0.20
125	NSS	TTL	B-1	26-50	51-75	HFPK	4,599,860	0	--	--	0.35	0.28
126	NSS	TTL	B-1	51-75	76-100	HFPK	2,381,104	0	--	--	0.68	0.42

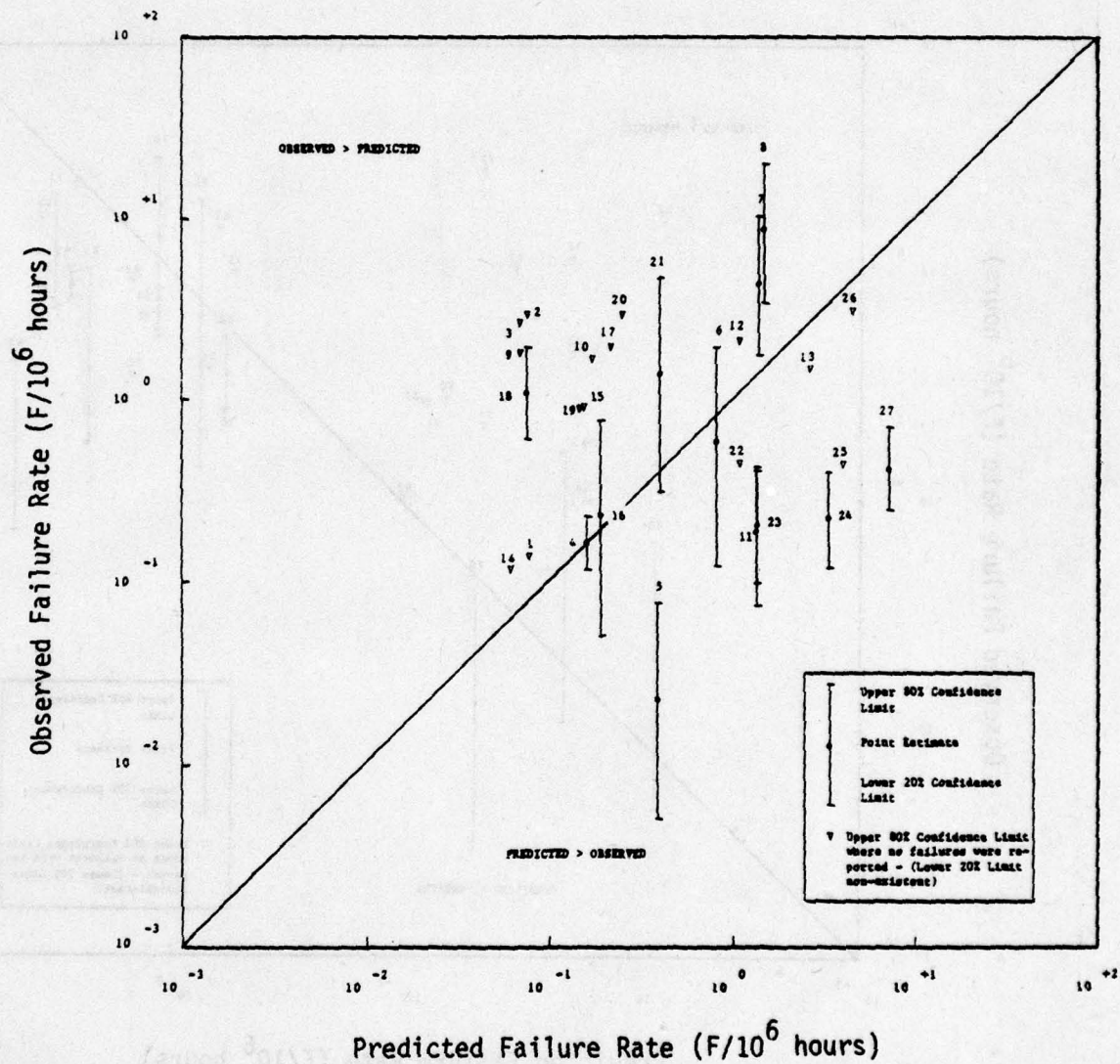


Figure 1: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For AI and AIU Environments

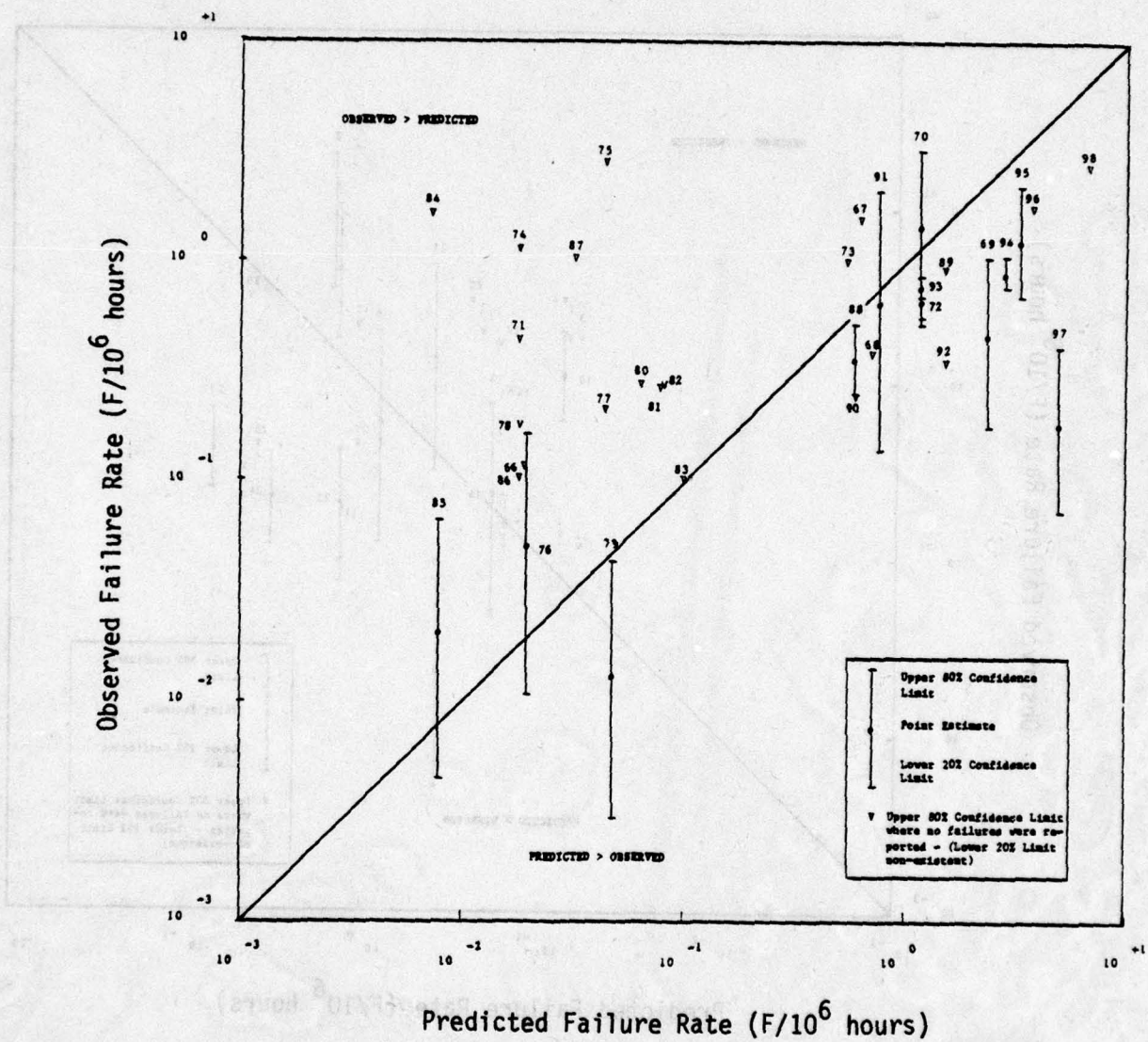


Figure 2: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For GF Environments

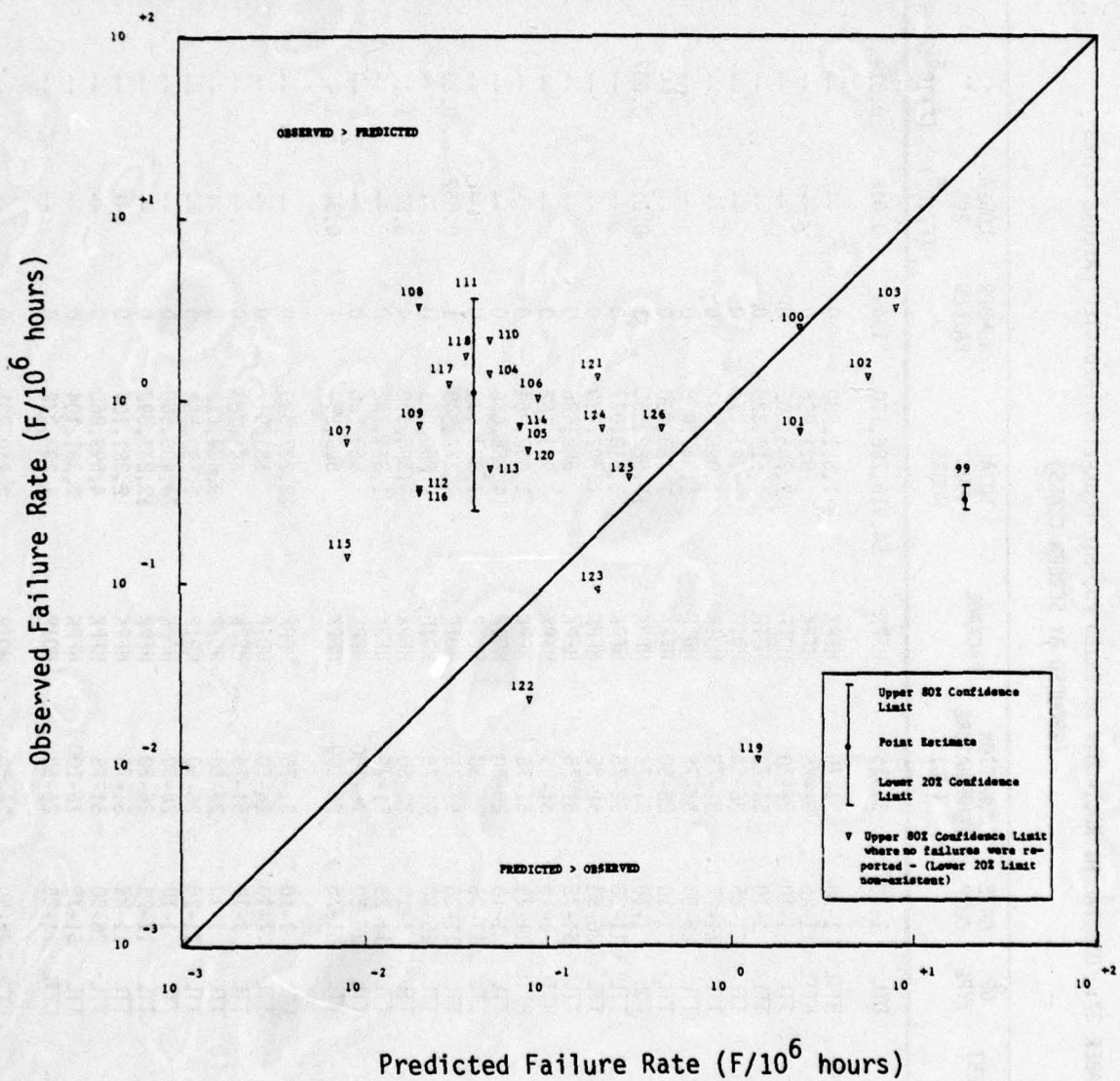


Figure 3: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For GM, GT and NS Environments

TABLE 27: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY SCREEN CLASS)

ENTRY NUMBER	SCREEN CLASS	ENVIRONMENT	OP TYPE	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
127	A-1	GBM	DTL	1-10	51-75	HFPK	54,916,786,170	1049	0.018	0.019	0.020	0.0012
128	B-1	AU	HTTL	1-10	51-75	HFPK	1,521,030	0	--	--	1.1	0.12
129	B-1	AU	HTTL	11-25	51-75	HFPK	821,996	0	--	--	2.0	0.29
130	B-1	AU	TTL	1-10	26-50	HDIP	2,745,503	0	--	--	0.59	0.12
131	B-1	AU	TTL	1-10	51-75	HDIP	519,228	0	--	--	3.1	0.12
132	B-1	AU	TTL	11-25	26-50	HDIP	747,274	0	--	--	2.1	0.28
133	B-1	AU	TTL	11-25	51-75	HDIP	1,006,887	0	--	--	1.6	0.29
134	B-1	AU	TTL	26-50	51-75	HDIP	1,367,072	0	--	--	1.2	0.41
135	B-1	AU	TTL	1-10	26-50	HFPK	1,183,850	0	--	--	1.4	0.12
136	B-1	AU	TTL	1-10	51-75	HFPK	17,582,535	1	0.013	0.057	0.17	0.12
137	B-1	AU	TTL	11-25	51-75	HFPK	3,518,077	0	--	--	0.46	0.29
138	B-1	AU	TTL	26-50	51-75	HFPK	1,702,230	0	--	--	0.95	0.41
139	B-1	AU	TTL	51-75	51-75	HFPK	589,698	0	--	--	2.7	0.51
140	B-1	AIU	HTTL	1-10	51-75	HFPK	963,162	0	--	--	1.7	0.080
141	B-1	AIU	HTTL	11-25	51-75	HFPK	1,000,964	0	--	--	1.6	0.20
142	B-1	AIU	TTL	1-10	26-50	HDIP	14,286,636	0	--	--	0.11	0.079
143	B-1	AIU	TTL	11-25	26-50	HDIP	1,834,690	0	--	--	0.88	0.19
144	B-1	AIU	TTL	11-25	51-75	HDIP	4,272,840	1	0.052	0.23	0.70	0.20
145	B-1	AIU	TTL	26-50	51-75	HFPK	860,861	0	--	--	1.9	0.28
146	B-1	AIU	TTL	1-10	26-50	HFPK	3,686,590	4	0.62	1.1	1.8	0.079
147	B-1	AIU	TTL	11-25	51-75	HFPK	1,874,152	0	--	--	0.86	0.20
148	B-1	AIU	TTL	26-50	76-100	HFPK	559,086	0	--	--	2.9	0.32
149	B-1	AIU	TTL	51-75	76-100	HFPK	689,264	1	0.32	1.4	4.3	0.42
150	B-1	AI	DTL	1-10	51-75	HFPK	12,227,330	0	--	--	0.13	0.080
151	B-1	AI	TTL	1-10	26-50	HDIP	551,917	0	--	--	2.9	0.079
152	B-1	AI	TTL	1-10	51-75	HFPK	644,783	0	--	--	2.5	0.080
153	B-1	NSS	TTL	1-10	26-50	HDIP	3,084,612	0	--	--	0.52	0.079
154	B-1	NSS	TTL	11-25	26-50	HDIP	1,190,552	0	--	--	1.3	0.19
155	B-1	NSS	TTL	1-10	26-50	HFPK	74,409,500	0	--	--	0.022	0.079
156	B-1	NSS	TTL	11-25	26-50	HFPK	18,237,092	0	--	--	0.088	0.19
157	B-1	NSS	TTL	11-25	51-75	HFPK	2,381,104	0	--	--	0.68	0.20
158	B-1	NSS	TTL	26-50	51-75	HFPK	4,599,860	0	--	--	0.35	0.28
159	B-1	NSS	TTL	51-75	76-100	HFPK	2,381,104	0	--	--	0.68	0.42
160	B-1	GT	LTTL	11-25	26-50	HDIP	1,237,272	0	--	--	1.3	0.049
161	B-1	GT	LTTL	26-50	26-50	HDIP	2,410,031	0	--	--	0.67	0.071
162	B-1	GT	LTTL	51-75	26-50	HDIP	1,615,002	0	--	--	1.0	0.090

TABLE 27: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY SCREEN CLASS) (Cont'd)

ENTRY NUMBER	SCREEN CLASS	ENVIRONMENT	OP TYPE	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ P (F/10 ⁶)
163	B-1	GT	STTL	1-10	26-50	HDIP	2,316,291	0	--	--	0.69	0.020
164	B-1	GT	STTL	11-25	26-50	HDIP	771,290	0	--	--	2.1	0.049
165	B-1	GT	TTL	1-10	26-50	HDIP	5,237,057	0	--	--	0.31	0.020
166	B-1	GT	TTL	11-25	26-50	HDIP	3,899,946	0	--	--	0.41	0.049
167	B-1	GT	TTL	26-50	26-50	HDIP	2,290,477	0	--	--	0.70	0.071
168	B-1	GF	DTL	1-10	26-50	HDIP	14,359,486	0	--	--	0.11	0.020
169	B-1	GF	HTTL	1-10	26-50	HDIP	3,720,145	0	--	--	0.43	0.020
170	B-1	GF	STTL	1-10	26-50	HDIP	1,454,320	0	--	--	1.1	0.020
171	B-1	GF	STTL	11-25	26-50	HDIP	593,116	0	--	--	2.7	0.049
172	B-1	GF	SUHL	1-10	26-50	HDIP	19,996,409	1	0.011	0.050	0.15	0.020
173	B-1	GF	SUHL	11-25	26-50	HDIP	7,989,384	0	--	--	0.20	0.049
174	B-1	GF	TTL	1-10	26-50	HDIP	9,316,022	0	--	--	0.17	0.020
175	B-1	GF	TTL	11-25	26-50	HDIP	74,688,530	1	0.0030	0.013	0.040	0.049
176	B-1	GF	TTL	26-50	26-50	HDIP	5,860,555	0	--	--	0.27	0.071
177	B-1	GF	TTL	26-50	51-75	HDIP	6,357,862	0	--	--	0.25	0.087
178	B-1	GF	TTL	51-75	26-50	HDIP	6,168,035	0	--	--	0.26	0.090
179	B-1	GF	TTL	51-75	51-75	HDIP	16,514,778	0	--	--	0.097	0.11
180	B-1 or JB	GF	TTL	1-10	26-50	HDIP	998,089	0	--	--	1.6	0.0081
181	JB	GT	LTL	1-10	26-50	HDIP	2,908,402	0	--	--	0.55	0.0081
182	JB	GT	LTL	11-25	26-50	HDIP	505,099	0	--	--	3.2	0.020
183	JB	GT	TTL	1-10	26-50	HDIP	12,451,275	0	--	--	0.13	0.0081
184	JB	GT	TTL	11-25	26-50	HDIP	5,604,741	0	--	--	0.29	0.020
185	JB	GT	TTL	26-50	26-50	HDIP	1,361,406	0	--	--	1.2	0.029
186	JB	GT	TTL	51-75	26-50	HDIP	934,034	0	--	--	1.7	0.036
187	JB	GF	TTL	1-10	26-50	HDIP	49,353,810	1	0.0045	0.020	0.061	0.0081
188	JB	GF	TTL	11-25	26-50	HDIP	16,498,680	0	--	--	0.098	0.020
189	JB	GF	TTL	51-75	26-50	HDIP	1,536,084	0	--	--	1.0	0.036
190	B-2	AI	TTL	1-10	51-75	HFPK	75,070,000	12	0.12	0.16	0.21	0.16
191	B-2	AI	TTL	11-25	51-75	HFPK	42,740,000	1	0.0052	0.023	0.070	0.39
192	B-2	AI	TTL	51-75	76-100	HFPK	1,690,000	1	0.13	0.59	1.8	0.83
193	B-2	GT	SUHL	1-10	26-50	HFPK	909,877	1	0.25	1.1	3.3	0.040
194	B-2 to N	AU	TTL	1-10	26-50	HDIP	8,794,228	13	1.1	1.5	1.9	0.24
195	B-2 to N	AU	TTL	11-25	26-50	HDIP	589,336	0	--	--	2.7	0.56
196	B-2 to N	AU	TTL	11-25	51-75	HDIP	1,723,616	2	0.48	1.2	2.5	0.58

TABLE 27: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY SCREEN CLASS) (Cont'd)

ENTRY NUMBER	SCREEN CLASS	ENVIRONMENT	OP TYPE	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ (F/10 ⁶)
197	B-2 to N	AU	TTL	26-50	51-75	HDIP	977,947	4	2.3	4.1	6.9	0.82
198	B-2 to N	AU	TTL	51-75	51-75	HDIP	1,181,059	1	0.19	0.85	2.5	1.0
199	C-1	AU	TTL	51-75	51-75	HFPK	2,041,182	0	--	--	0.79	9.2
200	C-1	AIU	DTL	1-10	26-50	HFPK	461,545	2	1.8	4.3	9.3	1.4
201	C-1	AIU	ECL	1-10	51-75	HFPK	233,866	2	3.5	8.6	18.	1.5
202	C-1	AIU	HTTL	1-10	51-75	HFPK	10,876,586	2	0.076	0.18	0.39	1.4
203	C-1	AIU	SUHL	1-10	26-50	HFPK	785,070	0	--	--	2.1	1.4
204	C-1	AIU	SUHL	11-25	26-50	HFPK	1,116,544	0	--	--	1.4	3.4
205	C-1	AIU	TTL	1-10	26-50	HFPK	3,848,301	0	--	--	0.42	1.4
206	C-1	AIU	TTL	1-10	51-75	HFPK	15,057,418	3	0.10	0.20	0.37	1.4
207	C-1	AIU	TTL	11-25	51-75	HFPK	18,429,443	4	0.12	0.22	0.36	3.5
208	C-1	AIU	TTL	26-50	51-75	HFPK	3,906,154	0	--	--	0.41	5.1
209	C-1	AIU	TTL	26-50	76-100	HFPK	535,486	0	--	--	3.0	5.8
210	C-1	AIU	TTL	51-75	76-100	HFPK	12,133,820	5	0.25	0.41	0.65	7.5
211	C-1	NSS	DTL	1-10	51-75	HFPK	166,010,000	0	--	--	0.010	1.4
212	N	GM	PMOS	26-50	51-75	PDIP	240,000,000	67	0.25	0.28	0.31	19.
213	N	GM	ECL	1-10	26-50	HDIP	691,884	0	--	--	2.3	2.4
214	N	GM	TTL	1-10	26-50	HDIP	2,594,565	0	--	--	0.62	2.4
215	N	GM	TTL	11-25	26-50	HDIP	1,210,797	0	--	--	1.3	5.6
216	N	GM	TTL	26-50	26-50	HDIP	518,913	0	--	--	3.1	8.0
217	N	GF	DTL	1-10	51-75	HFPK	1,060,000	0	--	--	1.5	0.66
218	N	GF	DTL	1-10	76-100	HFPK	4,470,000	0	--	--	0.36	0.79
219	N	GF	DTL	11-25	76-100	HFPK	4,470,000	2	0.18	0.45	0.96	2.4
220	N	GF	DTL	1-10	26-50	PDIP	1,460,000	2	0.56	1.4	2.9	1.2
221	N	GF	HTTL	1-10	26-50	PDIP	34,570,000	22	0.52	0.64	0.78	1.2
222	N	GF	LTTL	1-10	26-50	HFPK	1,670,000	0	--	--	0.96	0.61
223	N	GF	TTL	1-10	26-50	HDIP	28,437,000	10	0.26	0.35	0.48	0.61
224	N	GF	TTL	11-25	51-75	HDIP	1,878,000	0	--	--	0.86	1.7
225	N	GF	TTL	1-10	51-75	HFPK	6,890,000	0	--	--	0.23	0.66
226	N	GF	TTL	1-10	76-100	HFPK	1,590,000	1	0.14	0.63	1.9	0.79
227	N	GF	TTL	11-25	51-75	HFPK	4,770,000	0	--	--	0.34	1.7
228	N	GF	TTL	1-10	26-50	PDIP	279,309,000	206	0.69	0.74	0.78	1.2
229	N	GF	TTL	11-25	26-50	PDIP	71,975,000	62	0.77	0.86	0.97	3.0
230	N	GF	TTL	11-25	51-75	PDIP	3,344,000	4	0.69	1.2	2.0	3.5
231	N	GF	TTL	26-50	26-50	PDIP	970,000	0	--	--	1.7	4.3
232	N	GF	TTL	26-50	51-75	PDIP	11,149,000	2	0.074	0.18	0.38	5.2
233	N	GF	TTL	26-50	76-100	PDIP	626,000	0	--	--	2.6	7.7

TABLE 27: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY SCREEN CLASS) (Cont'd)

ENTRY NUMBER	SCREEN CLASS	ENVIRONMENT	OP TEST	GATE COMP	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
234	N	GBC	ECL	1-10	26-50	HDIP	27,653,040	1	0.0081	0.036	0.11	0.14
235	N	GBC	ECL	11-25	26-50	HDIP	11,915,820	3	0.13	0.25	0.46	0.38
236	N	GBC	ECL	11-25	51-75	HDIP	1,146,420	0	--	--	1.4	1.1
237	N	GBC	ECL	26-50	26-50	HDIP	2,466,540	0	--	--	0.65	0.59
238	N	GBC	STTL	1-10	26-50	PDIP	3,879,264	0	--	--	0.41	0.27
239	N	GBC	STTL	11-25	26-50	PDIP	6,131,898	1	0.036	0.16	0.49	0.76
240	N	GBC	STTL	26-50	26-50	PDIP	1,641,240	2	0.50	1.2	2.6	1.2
241	N	GBC	STTL	51-75	26-50	PDIP	2,584,776	10	2.8	3.9	5.3	1.5
242	N	GBC	TTL	1-10	26-50	PDIP	3,453,912	0	--	--	0.47	0.27
243	N	GBC	TTL	11-25	26-50	PDIP	2,192,448	2	0.38	0.91	2.0	0.76
244	N	GBC	TTL	51-75	26-50	PDIP	627,792	0	--	--	2.6	1.5
245	X	GBC	STTL	1-10	26-50	PDIP	2,943,260	0	--	--	0.55	0.27
246	X	GBC	STTL	11-25	26-50	PDIP	2,957,524	1	0.075	0.39	1.2	0.76
247	X	GBC	LSTTL	1-10	26-50	PDIP	851,652	0	--	--	1.9	0.27
248	X	GBC	LSTTL	11-25	26-50	PDIP	6,975,840	0	--	--	0.23	0.76
249	X	GBC	LSTTL	26-50	26-50	PDIP	10,800,000	0	--	--	0.15	1.2
250	X	GBC	LSTTL	51-75	26-50	PDIP	5,400,000	0	--	--	0.30	1.5
251	X	GBC	TTL	1-10	26-50	PDIP	2,069,400	0	--	--	0.78	0.27
252	X	GBC	TTL	11-25	26-50	PDIP	4,845,756	0	--	--	0.66	0.76

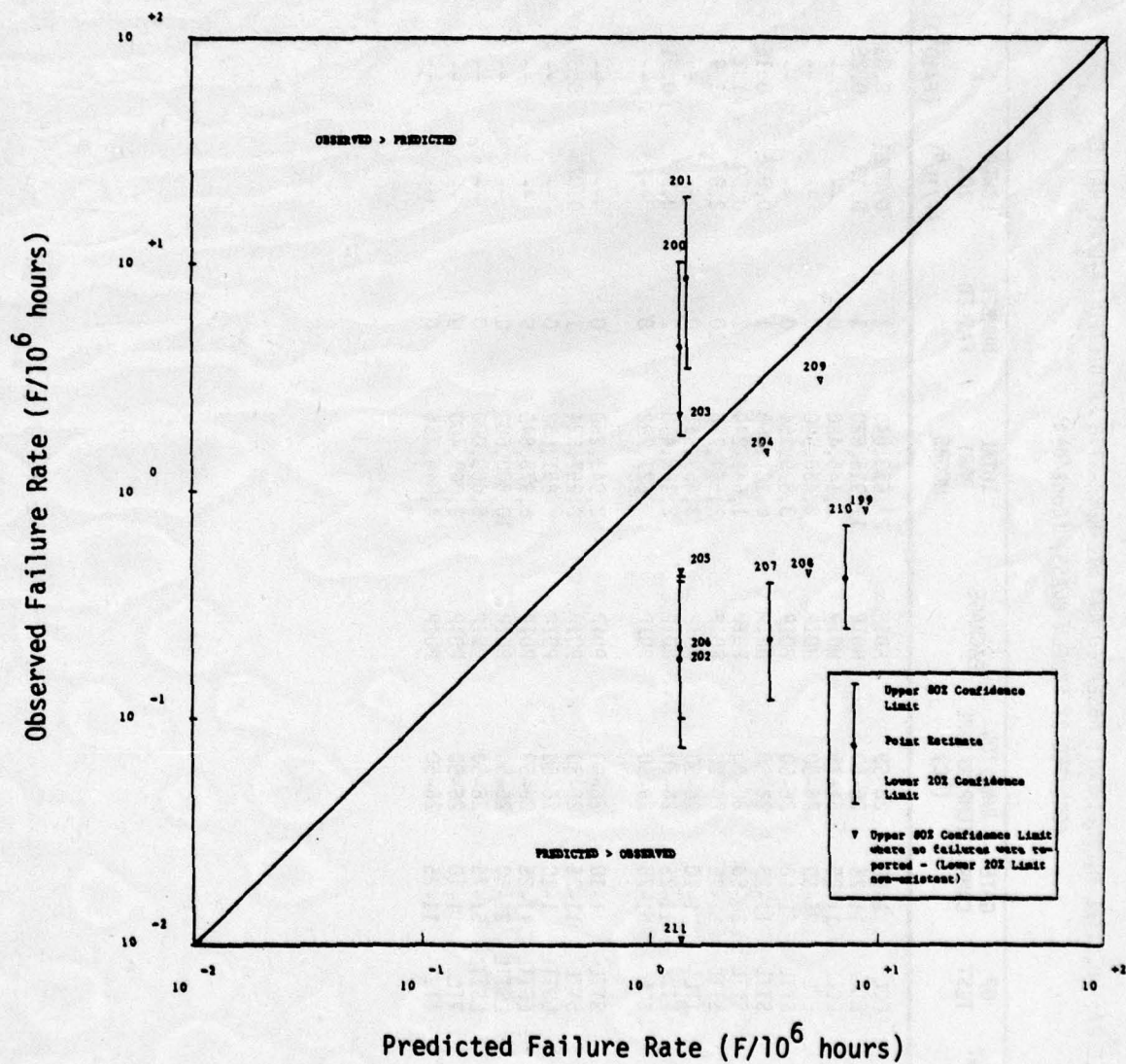


Figure 4: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Screen Class C-1 Microcircuits

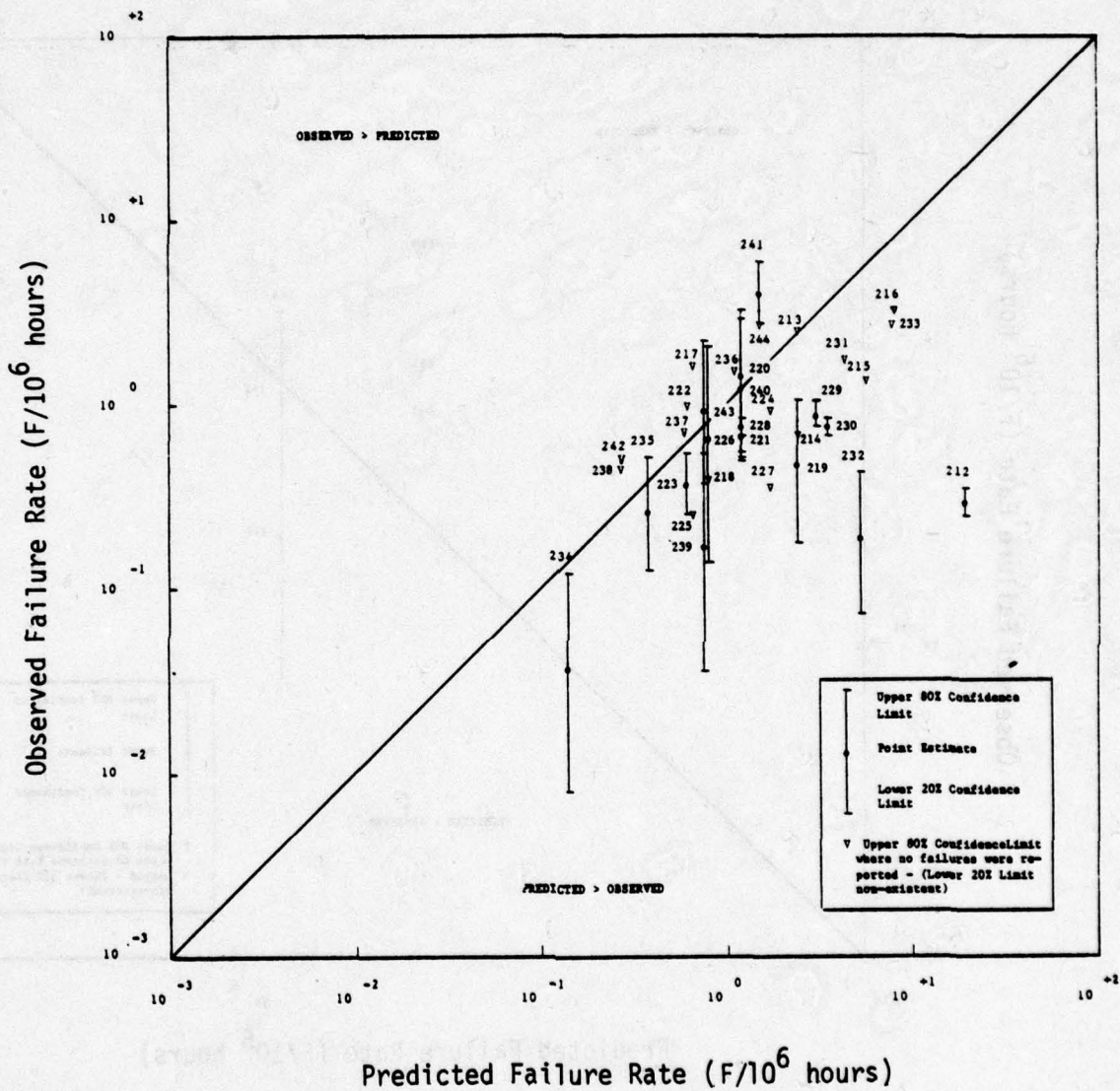


Figure 5: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Screen Class N Microcircuits

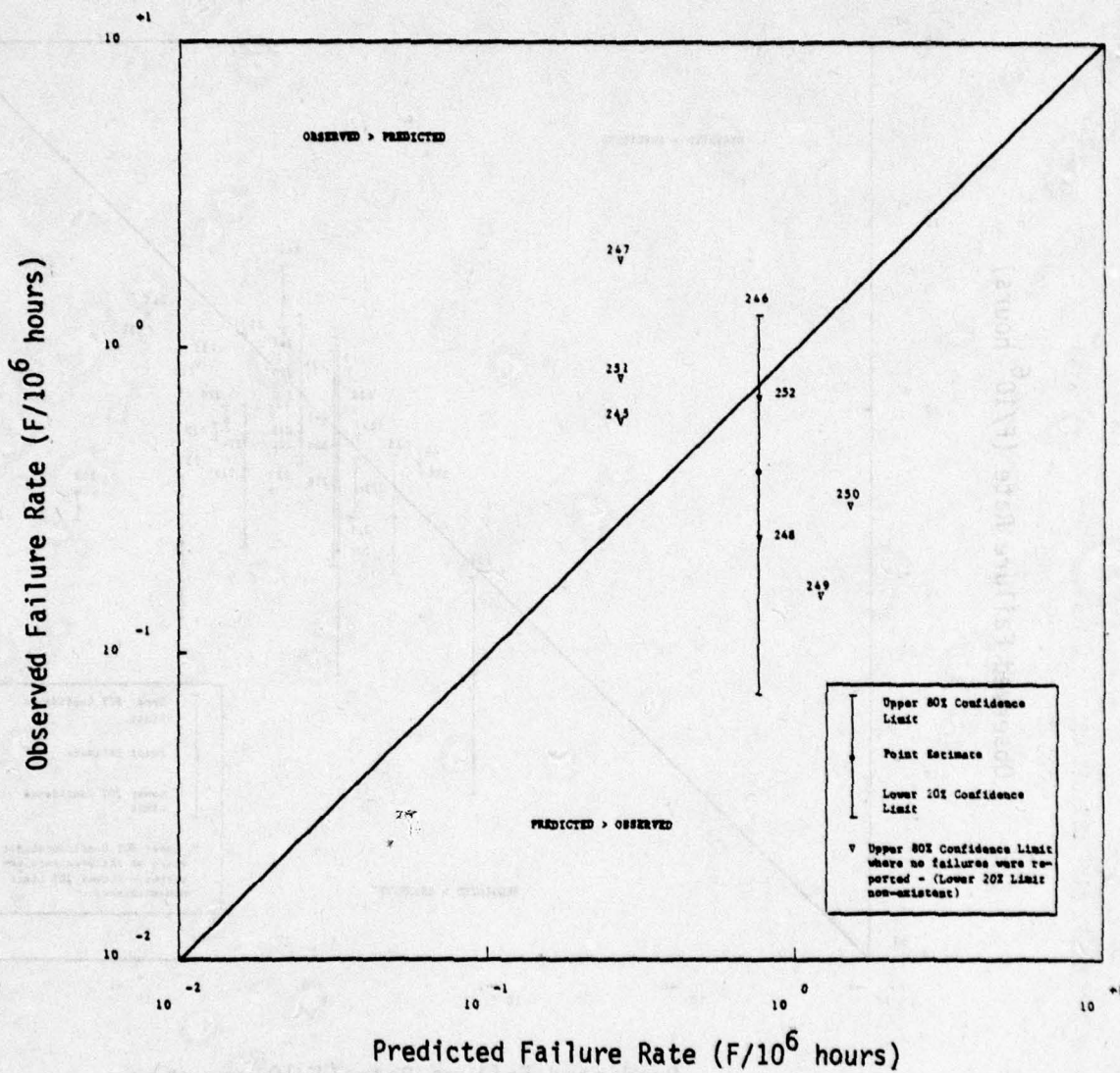


Figure 6: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Screen Class X Microcircuits

TABLE 28: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY GATE COMPLEXITY)

ENTRY NUMBER	GATE COMPLEXITY	OP TYPE	ENVIRONMENT	SCREEN CLASS	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_P (F/10 ⁶)
253	1-10	DTL	AIU	C-1	26-50	HFPK	461,545	2	1.8	4.3	9.3	1.4
254	1-10	DTL	AI	B-1	51-75	HFPK	12,227,330	0	--	--	0.13	0.080
255	1-10	DTL	NSS	C-1	51-75	HFPK	166,010,000	0	--	--	0.010	1.4
256	1-10	DTL	GF	B-1	26-50	HDIP	14,359,486	0	--	--	0.11	0.020
257	1-10	DTL	GF	N	51-75	HFPK	1,060,000	0	--	--	1.5	0.66
258	1-10	DTL	GF	N	76-100	HFPK	4,470,000	0	--	--	0.36	0.79
259	1-10	DTL	GF	N	26-50	PDIP	1,460,000	2	0.56	1.4	2.9	1.2
260	1-10	DTL	GBM	A-1	51-75	HFPK	54,916,786,170	1049	0.018	0.019	0.020	0.0012
261	1-10	ECL	AIU	C-1	51-75	HFPK	233,866	2	3.5	8.6	18.	1.5
262	1-10	ECL	GM	N	26-50	HDIP	691,884	0	--	0.036	2.3	2.4
263	1-10	ECL	GBC	N	26-50	HDIP	27,653,040	1	0.0081	0.11	1.1	0.14
264	1-10	HTTL	AU	B-1	51-75	HFPK	1,521,030	0	--	--	1.7	0.080
265	1-10	HTTL	AIU	B-1	51-75	HFPK	963,162	0	--	0.18	0.39	1.4
266	1-10	HTTL	AIU	C-1	51-75	HFPK	10,876,586	2	0.076	--	0.43	0.020
267	1-10	HTTL	GF	B-1	26-50	HDIP	3,720,145	0	--	--	0.78	1.2
268	1-10	HTTL	GF	N	26-50	PDIP	34,570,000	22	0.52	0.64	0.55	0.0081
269	1-10	LTL	GT	JB	26-50	HDIP	2,908,402	0	--	--	0.96	0.61
270	1-10	LTL	GF	N	26-50	HFPK	1,670,000	0	--	--	0.69	0.020
271	1-10	STTL	GT	B-1	26-50	HDIP	2,316,291	0	--	--	1.1	0.020
272	1-10	STTL	GF	B-1	26-50	HDIP	1,454,320	0	--	--	0.41	0.27
273	1-10	STTL	GBC	N	26-50	PDIP	3,879,264	0	--	--	0.55	0.27
274	1-10	STTL	GBC	X	26-50	PDIP	2,943,260	0	--	--	1.9	0.27
275	1-10	LSTTL	GBC	X	26-50	PDIP	851,652	0	--	--	2.1	1.4
276	1-10	SUHL	AIU	C-1	26-50	HFPK	785,070	0	--	--	3.3	0.040
277	1-10	SUHL	GT	B-2	26-50	HFPK	909,877	1	0.25	1.1	0.15	0.020
278	1-10	SUHL	GF	B-1	26-50	HDIP	19,996,409	1	0.011	0.050	0.59	0.12
279	1-10	TTL	AU	B-1	26-50	HDIP	2,745,503	0	--	--	3.1	0.12
280	1-10	TTL	AU	B-1	51-75	HDIP	519,288	0	--	--	1.4	0.12
281	1-10	TTL	AU	B-1	26-50	HFPK	1,183,850	0	--	--	0.17	0.12
282	1-10	TTL	AU	B-1	51-75	HFPK	17,582,535	1	0.013	0.057	1.9	0.12
283	1-10	TTL	AU	B-2 to N	26-50	HDIP	8,794,228	13	1.1	1.5	0.11	0.24
284	1-10	TTL	AIU	B-1	26-50	HDIP	14,286,636	0	--	--	1.8	0.079
285	1-10	TTL	AIU	B-1	26-50	HFPK	3,686,590	4	0.62	1.1	0.42	1.4
286	1-10	TTL	AIU	C-1	26-50	HFPK	3,848,301	0	--	--	0.37	1.4
287	1-10	TTL	AIU	C-1	51-75	HFPK	15,057,418	3	0.10	0.20	2.9	0.079
288	1-10	TTL	AI	B-1	26-50	HDIP	551,917	0	--	--	2.5	0.080
289	1-10	TTL	AI	B-1	51-75	HFPK	664,783	0	--	--	--	--

TABLE 28: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY GATE COMPLEXITY) (Cont'd)

ENTRY NUMBER	GATE COMPLEXITY	OP TYPE	ENVIRONMENT	SCREEN CLASS	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
290	1-10	TTL	AI	B-2	51-75	HFPK	75,070,000	12	0.12	0.16	0.21	0.16
291	1-10	TTL	GM	N	26-50	HDIP	2,594,565	0	--	--	0.62	2.4
292	1-10	TTL	NSS	B-1	26-50	HDIP	3,084,612	0	--	--	0.52	0.079
293	1-10	TTL	NSS	B-1	26-50	HFPK	74,409,500	0	--	--	0.022	0.079
294	1-10	TTL	GT	B-1	26-50	HDIP	5,237,057	0	--	--	0.31	0.020
295	1-10	TTL	GT	JB	26-50	HDIP	12,451,275	0	--	--	0.13	0.0081
296	1-10	TTL	GF	B-1	26-50	HDIP	9,316,022	0	--	--	0.17	0.020
297	1-10	TTL	GF	B-1 or JB	26-50	HDIP	998,089	0	--	--	1.6	0.0081
298	1-10	TTL	GF	JB	26-50	HDIP	49,353,810	1	0.0045	0.020	0.061	0.0081
299	1-10	TTL	GF	N	26-50	HDIP	28,437,000	10	0.26	0.35	0.48	0.61
300	1-10	TTL	GF	N	51-75	HFPK	6,890,000	0	--	--	0.23	0.66
301	1-10	TTL	GF	N	76-100	HFPK	1,590,000	1	0.14	0.63	1.9	0.79
302	1-10	TTL	GF	N	26-50	PDIP	279,309,000	206	0.69	0.74	0.78	1.2
303	1-10	TTL	GBC	N	26-50	PDIP	3,453,912	0	--	--	0.47	0.27
304	1-10	TTL	GBC	X	26-50	PDIP	2,069,400	0	--	--	0.78	0.27
305	11-25	DTL	GF	N	76-100	HFPK	4,470,000	2	0.18	0.45	0.96	2.4
306	11-25	ECL	GBC	N	26-50	HDIP	11,915,820	3	0.13	0.25	0.46	0.38
307	11-25	ECL	GBC	N	51-75	HDIP	1,146,420	0	--	--	1.4	1.1
308	11-25	HTTL	AU	B-1	51-75	HFPK	821,996	0	--	--	2.0	0.29
309	11-25	HTTL	AU	B-1	51-75	HFPK	1,000,964	0	--	--	1.6	0.20
310	11-25	LTTL	GT	B-1	26-50	HDIP	1,237,272	0	--	--	1.3	0.049
311	11-25	LTTL	GT	JB	26-50	HDIP	505,099	0	--	--	3.2	0.020
312	11-25	STTL	GT	B-1	26-50	HDIP	771,290	0	--	--	2.1	0.049
313	11-25	STTL	GF	B-1	26-50	HDIP	593,116	0	--	--	2.7	0.049
314	11-25	STTL	GBC	N	26-50	PDIP	6,131,898	1	0.036	0.16	0.49	0.76
315	11-25	STTL	GBC	X	26-50	PDIP	2,957,524	1	0.075	0.39	1.2	0.76
316	11-25	LSSTTL	GBC	X	26-50	PDIP	6,975,840	0	--	--	0.23	0.76
317	11-25	SUHL	AU	C-1	26-50	HFPK	1,116,544	0	--	--	1.4	3.4
318	11-25	SUHL	GF	B-1	26-50	HDIP	7,989,384	0	--	--	0.20	0.049
319	11-25	TTL	AU	B-1	26-50	HDIP	747,274	0	--	--	2.1	0.28
320	11-25	TTL	AU	B-1	51-75	HDIP	1,006,887	0	--	--	1.6	0.29
321	11-25	TTL	AU	B-1	51-75	HFPK	3,518,077	0	--	--	0.46	0.29
322	11-25	TTL	AU	B-2 to N	26-50	HDIP	589,336	0	--	--	2.7	0.56
323	11-25	TTL	AU	B-2 to N	51-75	HDIP	1,723,616	2	0.48	1.2	2.5	0.58

TABLE 28: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY GATE COMPLEXITY) (Cont'd)

ENTRY NUMBER	GATE COMPLEXITY	OP TYPE	ENVIRONMENT	SCREEN CLASS	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
324	11-25	TTL	AIU	B-1	26-50	HDIP	1,834,690	0	--	--	0.88	0.19
325	11-25	TTL	AIU	B-1	51-75	HDIP	4,272,840	1	0.052	0.23	0.70	0.20
326	11-25	TTL	AIU	B-1	51-75	HFKP	1,874,152	0	--	--	0.86	0.20
327	11-25	TTL	AIU	C-1	51-75	HFKP	18,429,443	4	0.12	0.22	0.36	3.5
328	11-25	TTL	AI	B-2	51-75	HFKP	42,740,000	1	0.0052	0.023	0.070	0.39
329	11-25	TTL	GM	N	26-50	HDIP	1,210,797	0	--	--	1.3	5.6
330	11-25	TTL	NSS	B-1	26-50	HDIP	1,910,552	0	--	--	1.3	0.19
331	11-25	TTL	NSS	B-1	26-50	HFKP	18,237,092	0	--	--	0.088	0.19
332	11-25	TTL	NSS	B-1	51-75	HFKP	2,381,104	0	--	--	0.68	0.20
333	11-25	TTL	GT	B-1	26-50	HDIP	3,899,946	0	--	--	0.41	0.049
334	11-25	TTL	GT	JB	26-50	HDIP	5,604,741	0	--	--	0.29	0.020
335	11-25	TTL	GF	B-1	26-50	HDIP	74,688,530	1	0.0030	0.013	0.040	0.049
336	11-25	TTL	GF	JB	26-50	HDIP	16,498,680	0	--	--	0.098	0.020
337	11-25	TTL	GF	N	51-75	HDIP	1,878,000	0	--	--	0.86	1.7
338	11-25	TTL	GF	N	51-75	HFKP	4,770,000	0	--	--	0.34	1.7
339	11-25	TTL	GF	N	26-50	PDIP	71,975,000	62	0.77	0.86	0.97	3.0
340	11-25	TTL	GF	N	51-75	PDIP	3,344,000	4	0.69	1.2	2.0	3.5
341	11-25	TTL	GBC	N	26-50	PDIP	2,192,448	2	0.38	0.91	2.0	0.76
342	11-25	TTL	GBC	X	26-50	PDIP	4,845,756	0	--	--	0.66	0.76
343	26-50	PMOS	GM	N	51-75	PDIP	240,000,000	67	0.25	0.28	0.31	19.
344	26-50	ECL	GBC	N	26-50	HDIP	2,466,540	0	--	--	0.65	0.59
345	26-50	LTL	GT	B-1	26-50	HDIP	2,410,031	0	--	--	0.67	0.071
346	26-50	STTL	GBC	N	26-50	PDIP	1,641,240	2	0.50	1.2	2.6	1.2
347	26-50	LSTTL	GBC	X	26-50	PDIP	10,800,000	0	--	--	0.15	1.2
348	26-50	TTL	AU	B-1	51-75	HDIP	1,367,072	0	--	--	1.2	0.41
349	26-50	TTL	AU	B-1	51-75	HFKP	1,702,230	0	--	--	0.95	0.41
350	26-50	TTL	AU	B-2 to N	51-75	HDIP	977,947	4	2.3	4.1	6.9	0.82
351	26-50	TTL	AIU	B-1	51-75	HDIP	860,861	0	--	--	1.9	0.28
352	26-50	TTL	AIU	B-1	76-100	HFKP	559,086	0	--	--	2.9	0.32
353	26-50	TTL	AIU	C-1	51-75	HFKP	3,906,154	0	--	--	0.41	5.1
354	26-50	TTL	AIU	C-1	76-100	HFKP	535,486	0	--	--	3.0	5.8
355	26-50	TTL	GM	N	26-50	HDIP	518,913	0	--	--	3.1	8.0
356	26-50	TTL	NSS	B-1	51-75	HFKP	4,599,860	0	--	--	0.35	0.28
357	26-50	TTL	GT	B-1	26-50	HDIP	2,290,477	0	--	--	0.70	0.071
358	26-50	TTL	GT	JB	26-50	HDIP	1,361,406	0	--	--	1.2	0.029
359	26-50	TTL	GF	B-1	26-50	HDIP	5,860,555	0	--	--	0.27	0.071
360	26-50	TTL	GF	B-1	51-75	HDIP	6,357,862	0	--	--	0.25	0.087

TABLE 28: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY GATE COMPLEXITY) (Cont'd)

ENTRY NUMBER	GATE COMPLEXITY	OP TYPE	ENVIRONMENT	SCREEN CLASS	JUNCTION TEMPERATURE (°C)	PACKAGE	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
361	26-50	TTL	GF	N	26-50	PDIP	970,000	0	--	--	1.7	4.3
362	26-50	TTL	GF	N	51-75	PDIP	11,149,000	2	0.074	0.18	0.38	5.2
363	26-50	TTL	GF	N	76-100	PDIP	626,000	0	--	--	2.6	7.7
364	51-75	LTL	GT	B-1	26-50	HDIP	1,615,002	0	--	--	1.0	0.090
365	51-75	STTL	GBC	N	26-50	PDIP	2,584,776	10	2.8	3.9	5.3	1.5
366	51-75	LSTTL	GBC	X	26-50	PDIP	5,400,000	0	--	--	0.30	1.5
367	51-75	TTL	AU	B-1	51-75	HFPK	589,698	0	--	--	2.7	0.51
368	51-75	TTL	AU	B-2 to N	51-75	HDIP	1,181,059	1	0.19	0.85	2.5	1.0
369	51-75	TTL	AU	C-1	51-75	HFPK	2,041,182	0	--	--	0.79	9.2
370	51-75	TTL	AIU	B-1	76-100	HFPK	689,264	1	0.32	1.4	4.3	0.42
371	51-75	TTL	AIU	C-1	76-100	HFPK	12,133,820	5	0.25	0.41	0.65	7.5
372	51-75	TTL	AI	B-2	76-100	HFPK	1,690,000	1	0.13	0.59	1.8	0.83
373	51-75	TTL	NSS	B-1	76-100	HFPK	2,381,104	0	--	--	1.7	0.42
374	51-75	TTL	GT	JB	26-50	HDIP	934,034	0	--	--	0.26	0.036
375	51-75	TTL	GF	B-1	26-50	HDIP	6,168,035	0	--	--	0.097	0.090
376	51-75	TTL	GF	B-1	51-75	HDIP	16,514,778	0	--	--	1.0	0.11
377	51-75	TTL	GF	JB	26-50	HDIP	1,536,084	0	--	--	2.6	0.036
378	51-75	TTL	GBC	N	26-50	PDIP	627,792	0	--	--	--	1.5

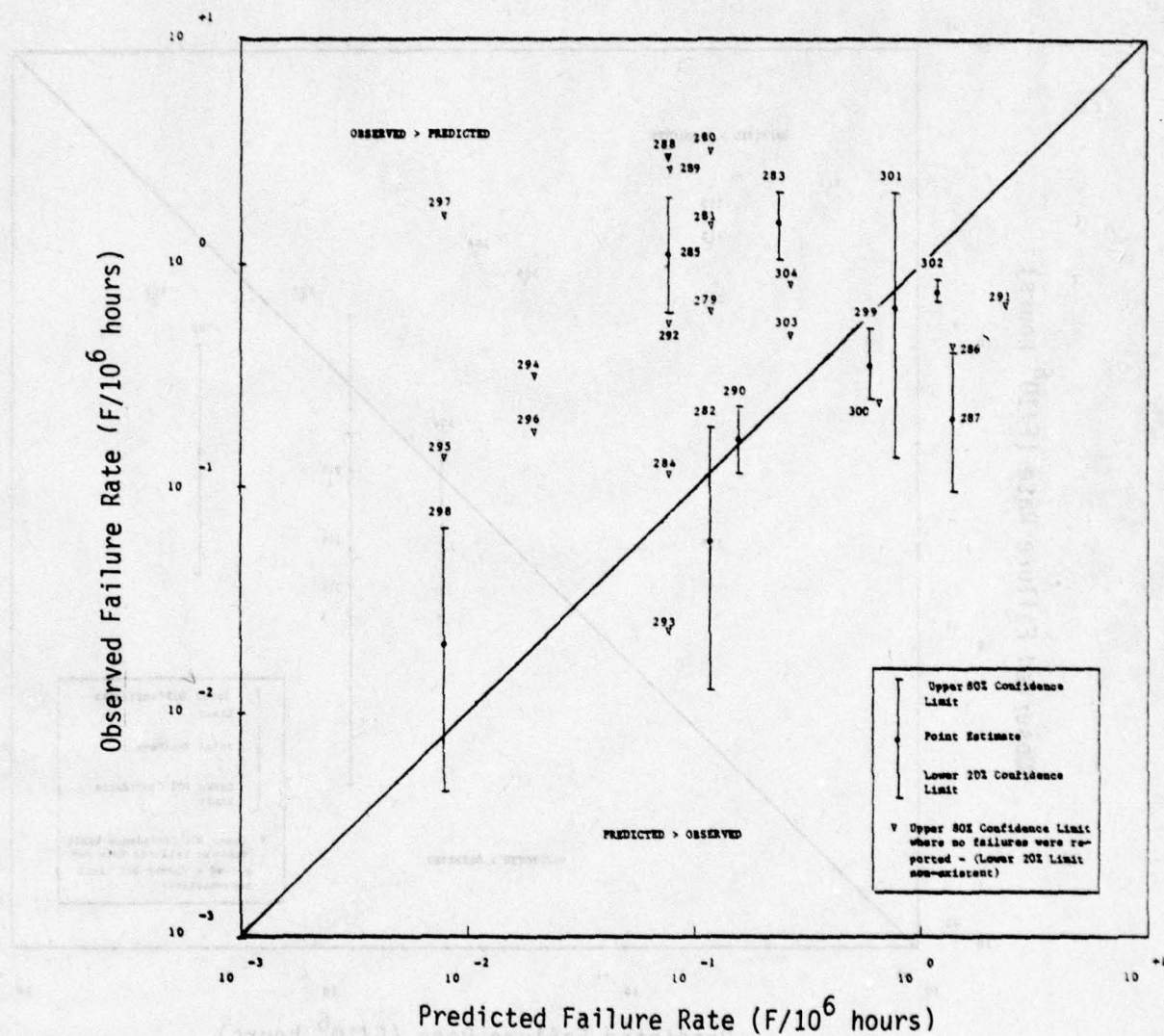


Figure 7: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates of SSI Complexity (1-10 Gates) For TTL Microcircuits

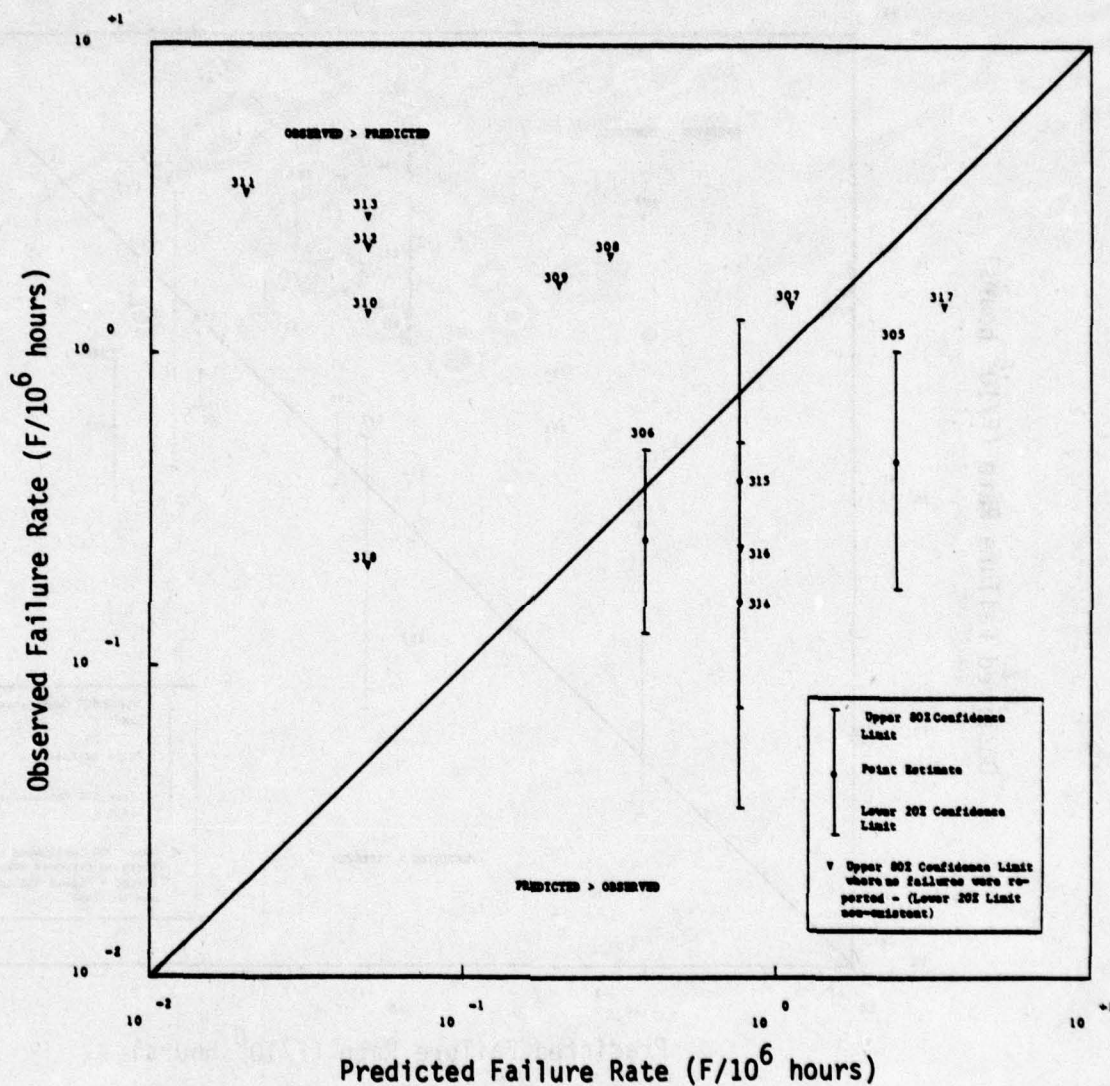


Figure 8: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates of MSI Complexity (11-25 Gates) For DTL, ECL, HTTL, LTTL, STTL, LSTTL and SUHL Microcircuits

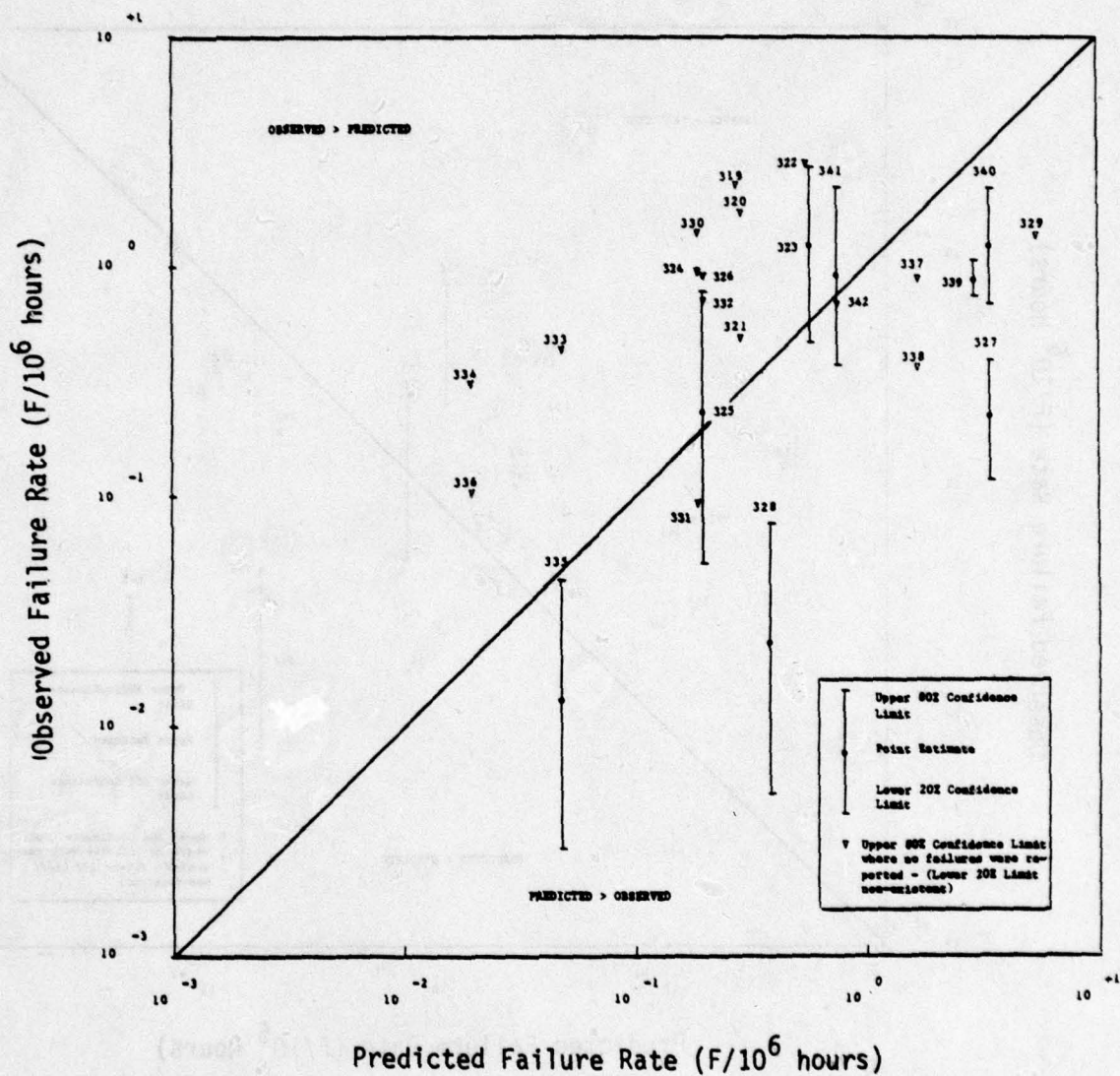


Figure 9: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates of MSI Complexity (11-25 Gates) For TTL Microcircuits

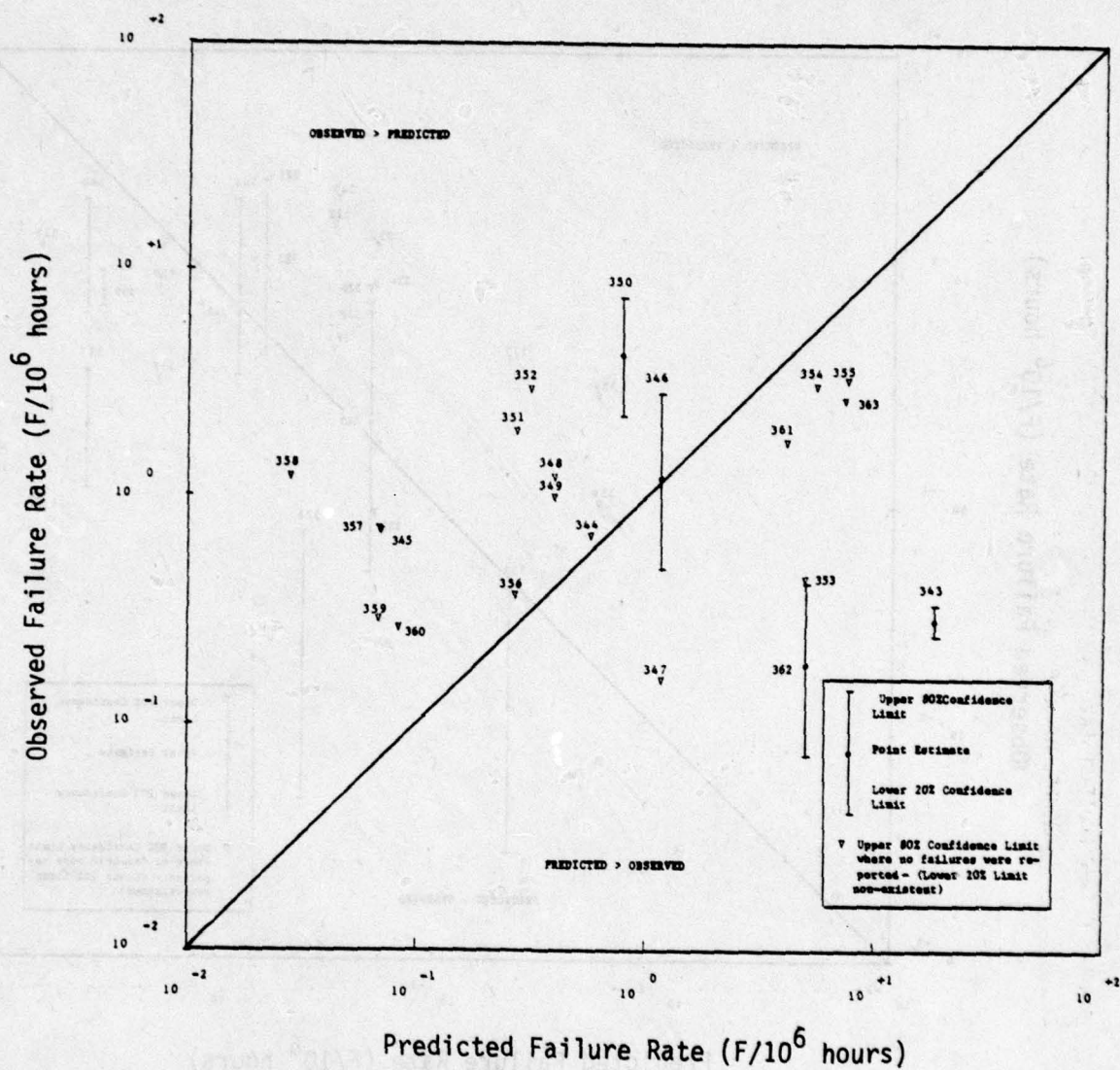


Figure 10: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates of MSI Complexity (26-50 Gates) Microcircuits

TABLE 29: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY JUNCTION TEMPERATURE)

ENTRY NUMBER	JUNCTION TEMPERATURE (°C)	PACKAGE	GATE COMPLEXITY	OP TYPE	SCREEN CLASS	ENVIRONMENT	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
379	26-50	HDIP	1-10	DTL	B-1	GF	14,359,486	0	--	--	0.11	0.020
380	26-50	HDIP	1-10	ECL	N	GM	691,884	0	--	--	2.3	2.4
381	26-50	HDIP	1-10	ECL	N	GBC	27,653,040	1	0.0081	0.036	0.11	0.14
382	26-50	HDIP	1-10	HTTL	B-1	GF	3,720,145	0	--	--	0.43	0.020
383	26-50	HDIP	1-10	HTTL	JB	GT	2,908,402	0	--	--	0.55	0.0081
384	26-50	HDIP	1-10	STTL	B-1	GT	2,316,291	0	--	--	0.69	0.020
385	26-50	HDIP	1-10	STTL	B-1	GF	1,454,320	0	--	--	1.1	0.020
386	26-50	HDIP	1-10	SUHL	B-1	GF	19,996,409	1	0.011	0.050	0.15	0.020
387	26-50	HDIP	1-10	TTL	B-1	AU	2,745,503	0	--	--	0.59	0.12
388	26-50	HDIP	1-10	TTL	B-2 to N	AU	8,794,228	13	1.1	1.5	1.9	0.24
389	26-50	HDIP	1-10	TTL	B-1	AUI	14,286,636	0	--	--	0.11	0.079
390	26-50	HDIP	1-10	TTL	B-1	AI	551,917	0	--	--	2.9	0.079
391	26-50	HDIP	1-10	TTL	N	GM	2,594,565	0	--	--	0.62	2.4
392	26-50	HDIP	1-10	TTL	B-1	NSS	3,084,612	0	--	--	0.52	0.079
393	26-50	HDIP	1-10	TTL	B-1	GT	5,237,057	0	--	--	0.31	0.020
394	26-50	HDIP	1-10	TTL	JB	GT	12,451,275	0	--	--	0.13	0.0081
395	26-50	HDIP	1-10	TTL	B-1	GF	9,316,022	0	--	--	0.17	0.020
396	26-50	HDIP	1-10	TTL	B-1 or JB	GF	998,089	0	--	--	1.6	0.0081
397	26-50	HDIP	1-10	TTL	JB	GF	49,353,810	1	0.0045	0.020	0.061	0.0081
398	26-50	HDIP	1-10	TTL	N	GF	28,437,000	10	0.26	0.35	0.48	0.61
399	26-50	HDIP	11-25	ECL	N	GBC	11,915,820	3	0.13	0.25	0.46	0.38
400	26-50	HDIP	11-25	LITL	B-1	GT	1,237,272	0	--	--	1.3	0.049
401	26-50	HDIP	11-25	LITL	JB	GT	505,099	0	--	--	3.2	0.020
402	26-50	HDIP	11-25	STTL	B-1	GT	771,290	0	--	--	2.1	0.049
403	26-50	HDIP	11-25	STTL	B-1	GF	593,116	0	--	--	2.7	0.049
404	26-50	HDIP	11-25	SUHL	B-1	GF	7,989,384	0	--	--	0.20	0.049
405	26-50	HDIP	11-25	TTL	B-1	AU	747,274	0	--	--	2.1	0.28
406	26-50	HDIP	11-25	TTL	B-2 to N	AU	589,336	0	--	--	2.7	0.56
407	26-50	HDIP	11-25	TTL	B-1	AUI	1,834,690	0	--	--	0.88	0.19
408	26-50	HDIP	11-25	TTL	N	GM	1,210,797	0	--	--	1.3	5.6
409	26-50	HDIP	11-25	TTL	B-1	NSS	1,910,552	0	--	--	1.3	0.19
410	26-50	HDIP	11-25	TTL	B-1	GT	3,899,946	0	--	--	0.41	0.049
411	26-50	HDIP	11-25	TTL	JB	GT	5,604,741	0	--	--	0.29	0.020
412	26-50	HDIP	11-25	TTL	B-1	GF	74,688,530	1	0.0030	0.013	0.040	0.049
413	26-50	HDIP	11-25	TTL	JB	GF	16,498,680	0	--	--	0.098	0.020
414	26-50	HDIP	26-50	ECL	N	GBC	2,466,540	0	--	--	0.65	0.59
415	26-50	HDIP	26-50	LITL	B-1	GT	2,410,031	0	--	--	0.67	0.071
416	26-50	HDIP	26-50	TTL	N	GM	518,913	0	--	--	3.1	8.0
417	26-50	HDIP	26-50	TTL	B-1	GT	2,290,477	0	--	--	0.70	0.071

TABLE 29: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY JUNCTION TEMPERATURE) (Cont'd)

ENTRY NUMBER	JUNCTION TEMPERATURE (°C)	PACKAGE	GATE COMPLEXITY	CP TYPE	SCREEN CLASS	ENVIRONMENT	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
418	26-50	HDIP	26-50	TTL	JB	GT	1,361,406	0	--	--	1.2	0.029
419	26-50	HDIP	26-50	TTL	B-1	GF	5,860,555	0	--	--	0.27	0.071
420	26-50	HDIP	51-75	LTL	B-1	GT	1,615,002	0	--	--	1.0	0.090
421	26-50	HDIP	51-75	TTL	JB	GT	934,034	0	--	--	1.7	0.036
422	26-50	HDIP	51-75	TTL	B-1	GF	6,168,035	0	--	--	0.26	0.090
423	26-50	HDIP	51-75	TTL	JB	GF	1,536,084	0	--	--	1.0	0.036
424	26-50	HFPK	1-10	DTL	C-1	AIU	461,545	2	1.8	4.3	9.3	1.4
425	26-50	HFPK	1-10	LTL	N	GF	1,670,000	0	--	--	0.96	0.61
426	26-50	HFPK	1-10	SUHL	C-1	AIU	785,070	0	--	--	2.1	1.4
427	26-50	HFPK	1-10	SUHL	B-2	GT	909,877	1	0.25	1.1	3.3	0.040
428	26-50	HFPK	1-10	TTL	B-1	AU	1,183,850	0	--	--	1.4	0.12
429	26-50	HFPK	1-10	TTL	B-1	AIU	3,686,590	4	0.62	1.1	1.8	0.079
430	26-50	HFPK	1-10	TTL	C-1	AIU	3,848,301	0	--	--	0.42	1.4
431	26-50	HFPK	1-10	TTL	B-1	NSS	74,409,500	0	--	--	0.022	0.079
432	26-50	HFPK	11-25	SUHL	C-1	AIU	1,116,544	0	--	--	1.4	3.4
433	26-50	HFPK	11-25	TTL	B-1	NSS	18,237,092	0	--	--	0.088	0.19
434	26-50	PDIP	1-10	DTL	N	GF	1,460,000	2	0.56	1.4	2.9	1.2
435	26-50	PDIP	1-10	HTTL	N	GF	34,570,000	22	0.52	0.64	0.78	1.2
436	26-50	PDIP	1-10	STTL	N	GBC	3,879,264	0	--	--	0.41	0.27
437	26-50	PDIP	1-10	STTL	X	GBC	2,943,260	0	--	--	0.55	0.27
438	26-50	PDIP	1-10	LSSTL	X	GBC	851,652	0	--	--	1.9	0.27
439	26-50	PDIP	1-10	TTL	N	GF	279,309,000	206	0.69	0.74	0.78	1.2
440	26-50	PDIP	1-10	TTL	N	GBC	3,453,912	0	--	--	0.47	0.27
441	26-50	PDIP	1-10	TTL	X	GBC	2,069,400	0	--	--	0.78	0.27
442	26-50	PDIP	11-25	STTL	N	GBC	6,131,898	1	0.036	0.16	0.49	0.76
443	26-50	PDIP	11-25	STTL	X	GBC	2,957,524	1	0.075	0.39	1.2	0.76
444	26-50	PDIP	11-25	LSSTL	X	GBC	6,975,840	0	--	--	0.23	0.76
445	26-50	PDIP	11-25	TTL	N	GF	71,975,000	62	0.77	0.86	0.97	3.0
446	26-50	PDIP	11-25	TTL	N	GBC	2,192,448	2	0.38	0.91	2.0	0.76
447	26-50	PDIP	11-25	TTL	X	GBC	4,845,756	0	--	--	0.66	0.76
448	26-50	PDIP	26-50	STTL	N	GBC	1,641,240	2	0.50	1.2	2.6	1.2
449	26-50	PDIP	26-50	LSSTL	X	GBC	10,800,000	0	--	--	0.15	1.2
450	26-50	PDIP	26-50	TTL	N	GF	970,000	0	--	--	1.7	4.3
451	26-50	PDIP	51-75	STTL	N	GBC	2,584,776	10	2.8	3.9	5.3	1.5
452	26-50	PDIP	51-75	LSSTL	X	GBC	5,400,000	0	--	--	0.30	1.5
453	26-50	PDIP	51-75	TTL	N	GBC	627,792	0	--	--	2.6	1.5
454	51-75	HDIP	1-10	TTL	B-1	AU	519,288	0	--	--	3.1	0.12
455	51-75	HDIP	11-25	ECL	N	GBC	1,146,420	0	--	--	1.4	1.1

TABLE 29: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY JUNCTION TEMPERATURE) (Cont'd)

ENTRY NUMBER	JUNCTION TEMPERATURE (°C)	PACKAGE	GATE COMPLEXITY	OP TYPE	SCREEN CLASS	ENVIRONMENT	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ (F/10 ⁶)
456	51-75	HDIP	11-25	TTL	B-1	AU	1,006,887	0	--	--	1.6	0.29
457	51-75	HDIP	11-25	TTL	B-2 to N	AU	1,723,616	2	0.48	1.2	2.5	0.58
458	51-75	HDIP	11-25	TTL	B-1	AIU	4,272,840	1	0.052	0.23	0.70	0.20
459	51-75	HDIP	11-25	TTL	N	GF	1,878,000	0	--	--	0.86	1.7
460	51-75	HDIP	26-50	TTL	B-1	AU	1,367,072	0	--	--	1.2	0.41
461	51-75	HDIP	26-50	TTL	B-2 to N	AU	977,947	4	2.3	4.1	6.9	0.82
462	51-75	HDIP	26-50	TTL	B-1	AIU	860,861	0	--	--	1.9	0.28
463	51-75	HDIP	26-50	TTL	B-1	GF	6,357,862	0	--	--	0.25	0.087
464	51-75	HDIP	51-75	TTL	B-2 to N	AU	1,181,059	1	0.19	0.85	2.5	1.0
465	51-75	HDIP	51-75	TTL	B-1	GF	16,514,778	0	--	--	0.097	0.11
466	51-75	HFPK	1-10	DTL	B-1	AI	12,227,330	0	--	--	0.13	0.080
467	51-75	HFPK	1-10	DTL	C-1	NSS	166,010,000	0	--	--	0.010	1.4
468	51-75	HFPK	1-10	DTL	N	GF	1,060,000	0	--	--	1.5	0.66
469	51-75	HFPK	1-10	DTL	A-1	GBM	54,916,786,170	1049	0.018	0.019	0.020	0.0012
470	51-75	HFPK	1-10	ECL	C-1	AIU	233,866	2	3.5	8.6	18.	1.5
471	51-75	HFPK	1-10	HTTL	B-1	AU	1,521,030	0	--	--	1.1	0.12
472	51-75	HFPK	1-10	HTTL	B-1	AIU	963,162	0	--	--	1.7	0.080
473	51-75	HFPK	1-10	HTTL	C-1	AIU	10,876,586	2	0.076	0.18	0.39	1.4
474	51-75	HFPK	1-10	TTL	B-1	AU	17,582,535	1	0.013	0.057	0.17	0.12
475	51-75	HFPK	1-10	TTL	C-1	AIU	15,057,418	3	0.10	0.20	0.37	1.4
476	51-75	HFPK	1-10	TTL	B-1	AI	644,783	0	--	--	2.5	0.080
477	51-75	HFPK	1-10	TTL	B-2	AI	75,070,000	12	0.12	0.16	0.21	0.16
478	51-75	HFPK	1-10	TTL	N	GF	6,890,000	0	--	--	0.23	0.66
479	51-75	HFPK	11-25	HTTL	B-1	AU	821,996	0	--	--	2.0	0.29
480	51-75	HFPK	11-25	HTTL	B-1	AIU	1,000,964	0	--	--	1.6	0.20
481	51-75	HFPK	11-25	TTL	B-1	AU	3,518,077	0	--	--	0.46	0.29
482	51-75	HFPK	11-25	TTL	B-1	AIU	1,874,152	0	--	--	0.86	0.20
483	51-75	HFPK	11-25	TTL	C-1	AIU	18,429,443	4	0.12	0.22	0.36	3.5
484	51-75	HFPK	11-25	TTL	B-2	AI	42,740,000	1	0.0052	0.023	0.070	0.39
485	51-75	HFPK	11-25	TTL	B-1	NSS	2,381,104	0	--	--	0.68	0.20
486	51-75	HFPK	11-25	TTL	N	GF	4,770,000	0	--	--	0.34	1.7
487	51-75	HFPK	26-50	TTL	B-1	AU	1,702,230	0	--	--	0.95	0.41
488	51-75	HFPK	26-50	TTL	C-1	AIU	3,906,154	0	--	--	0.41	5.1
489	51-75	HFPK	26-50	TTL	B-1	NSS	4,599,860	0	--	--	0.35	0.28
490	51-75	HFPK	51-75	TTL	B-1	AU	589,698	0	--	--	2.7	0.51
491	51-75	HFPK	51-75	TTL	C-1	AU	2,041,182	0	--	--	0.79	9.2
492	51-75	PDIP	11-25	TTL	N	GF	3,344,000	4	0.69	1.2	2.0	3.5
493	51-75	PDIP	26-50	PMOS	N	GM	240,000,000	67	0.25	0.28	0.31	19.
494	51-75	PDIP	26-50	TTL	N	GF	11,149,000	2	0.074	0.18	0.38	5.2

TABLE 29: DIGITAL MICROCIRCUIT OBSERVED AND MIL-HDBK-217B PREDICTED FAILURE RATES
(GROUPED BY JUNCTION TEMPERATURE) (Cont'd)

ENTRY NUMBER	JUNCTION TEMPERATURE (°C)	PACKAGE	GATE COMPLEXITY	OP TYPE	SCREEN CLASS	ENVIRONMENT	TOTAL PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)	PREDICTED λ_p (F/10 ⁶)
495	76-100	HFPK	1-10	DTL	N	GF	4,470,000	0	--	--	0.36	0.79
496	76-100	HFPK	1-10	TTL	N	GF	1,590,000	1	0.14	0.63	1.9	0.79
497	76-100	HFPK	11-25	DTL	N	GF	4,470,000	2	0.18	0.45	0.96	2.4
498	76-100	HFPK	26-50	TTL	B-1	AIU	559,086	0	--	--	2.9	0.32
499	76-100	HFPK	26-50	TTL	C-1	AIU	535,486	0	--	--	3.0	5.8
500	76-100	HFPK	51-75	TTL	B-1	AIU	689,264	1	0.32	1.4	4.3	0.42
501	76-100	HFPK	51-75	TTL	C-1	AIU	12,133,820	5	0.25	0.41	0.65	7.5
502	76-100	HFPK	51-75	TTL	B-2	AI	1,690,000	1	0.13	0.59	1.8	0.83
503	76-100	HFPK	51-75	TTL	B-1	NSS	2,381,104	0	--	--	0.68	0.42
504	76-100	PDIP	26-50	TTL	N	GF	626,000	0	--	--	2.6	7.7

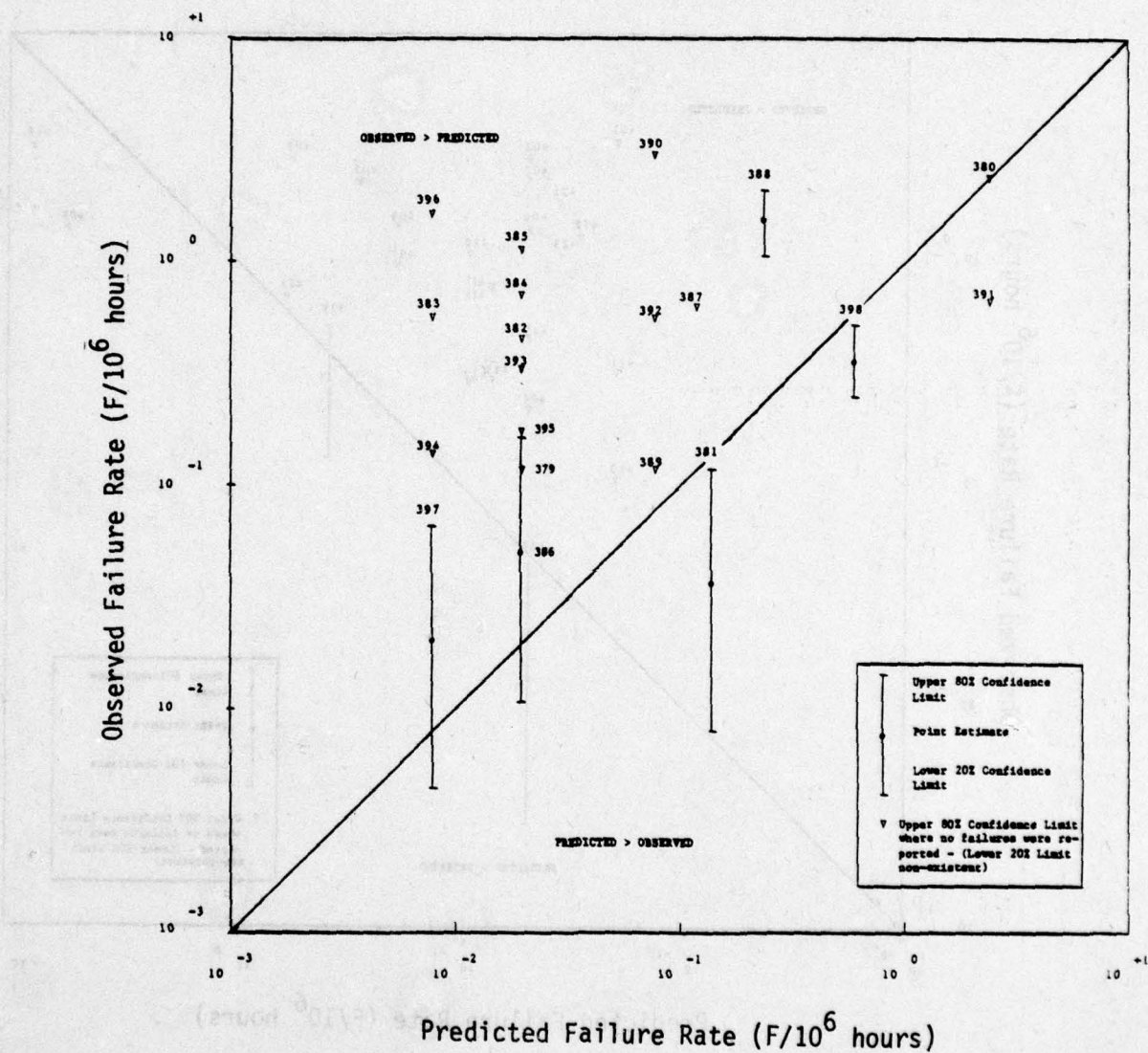


Figure 11: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Junction Temperatures of 26°C to 50°C and SSI Complexity (1-10 Gates) Microcircuits in HDIPs

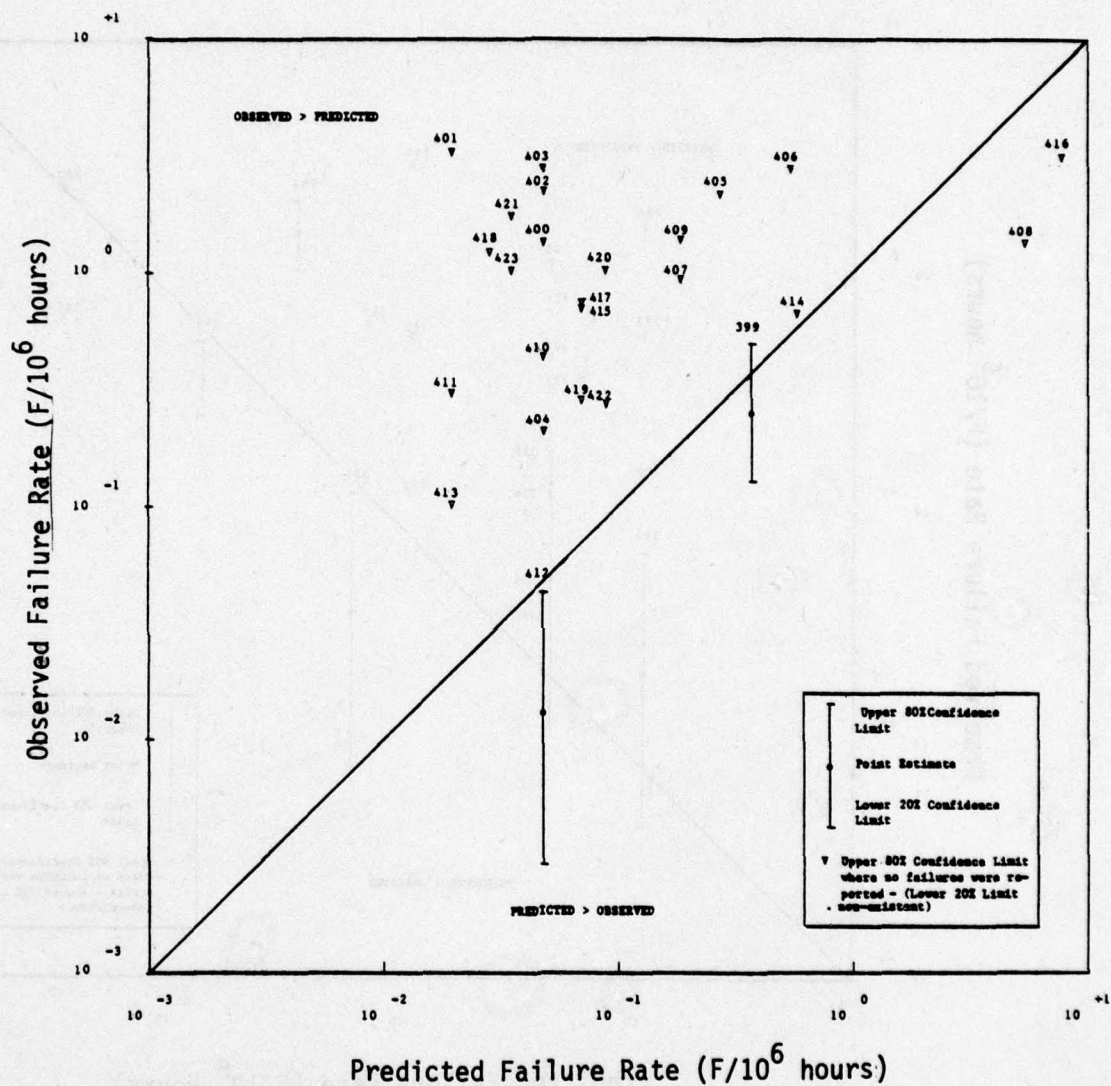


Figure 12: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Junction Temperatures of 26°C to 50°C and MSI Complexity (11-75 Gates) Microcircuits in HDIPs

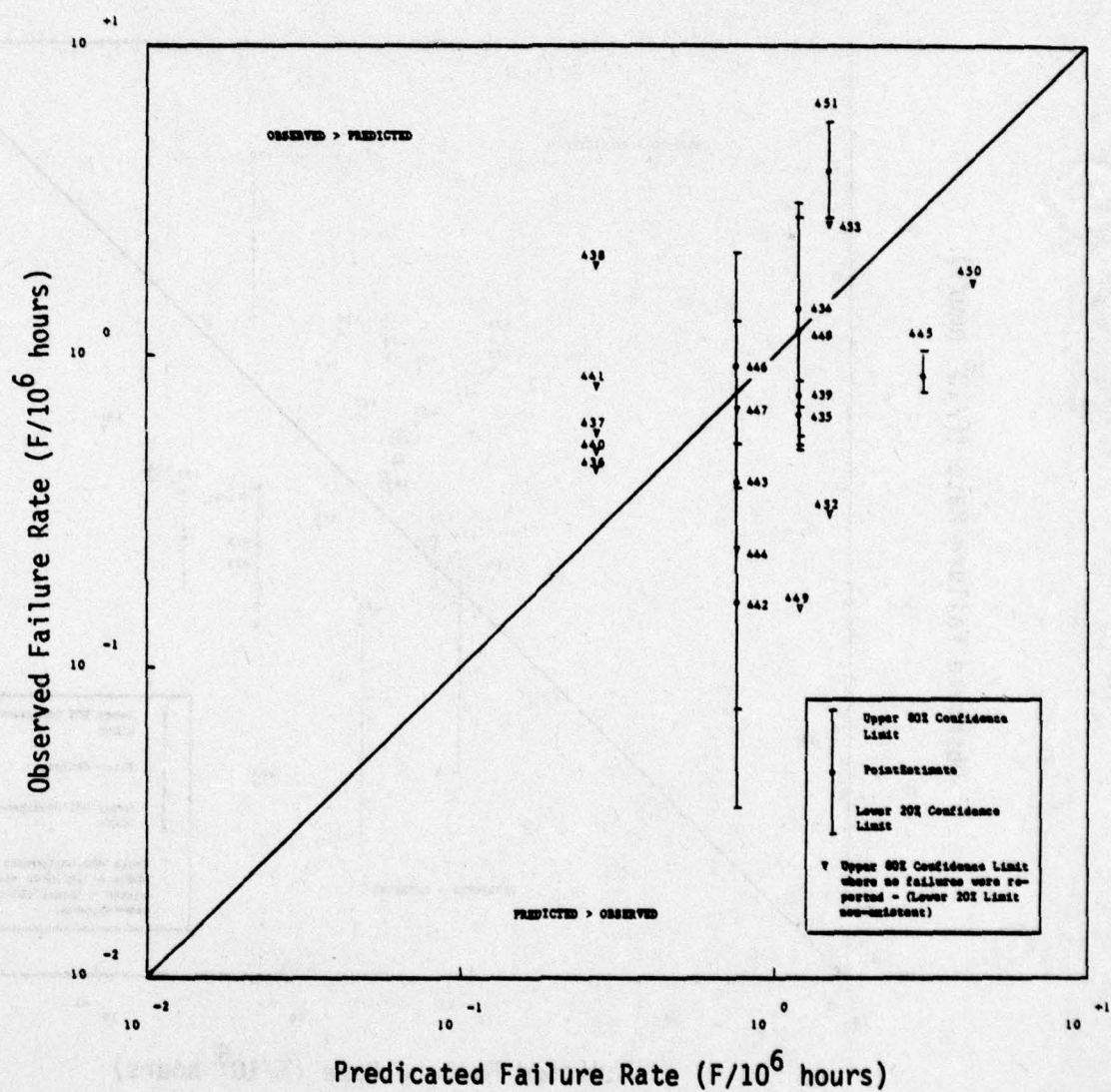


Figure 13: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Junction Temperatures of 26°C to 50°C For PDIP Microcircuits

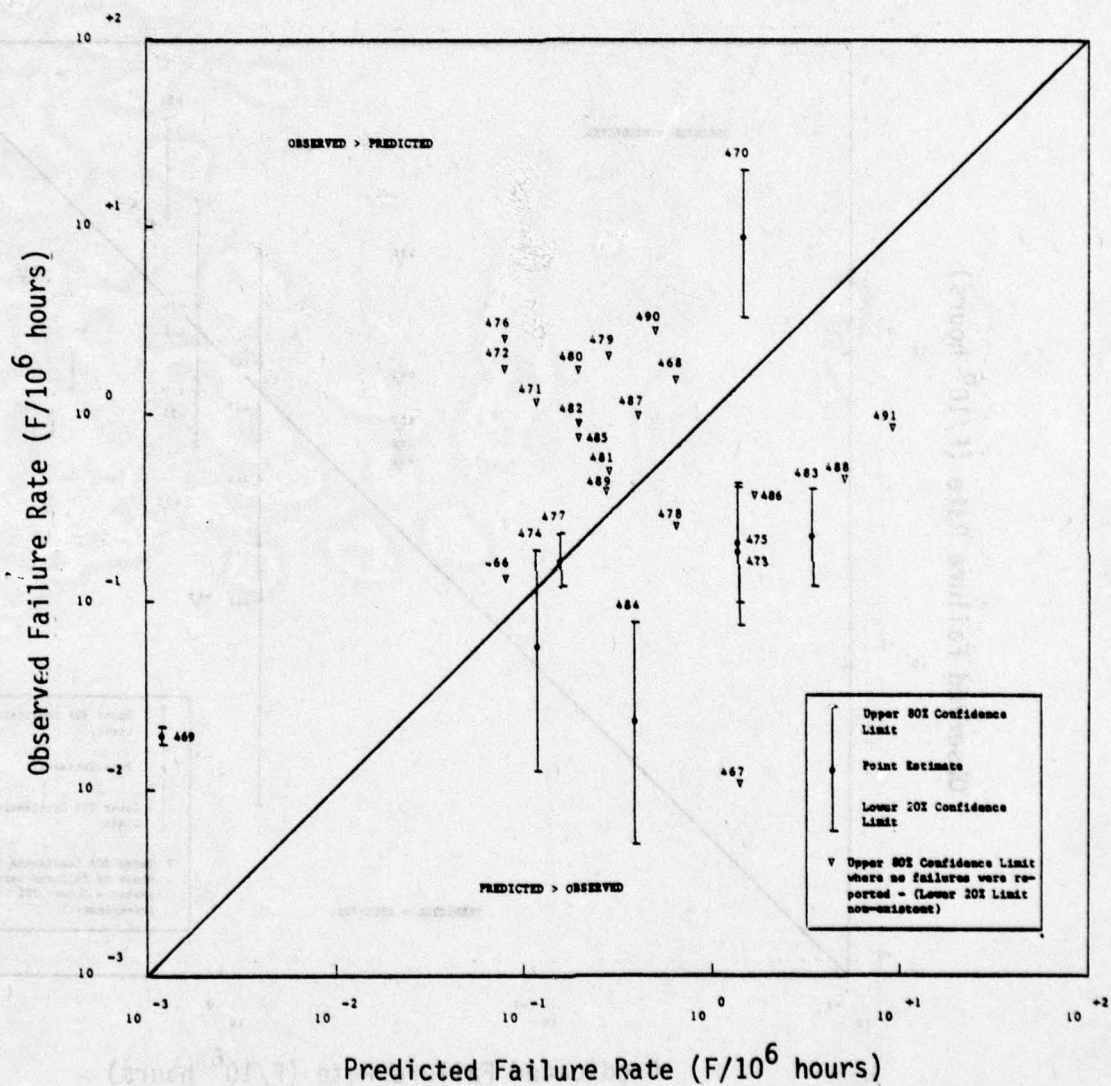


Figure 14: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Junction Temperatures of 51°C to 75°C For HFPK Microcircuits

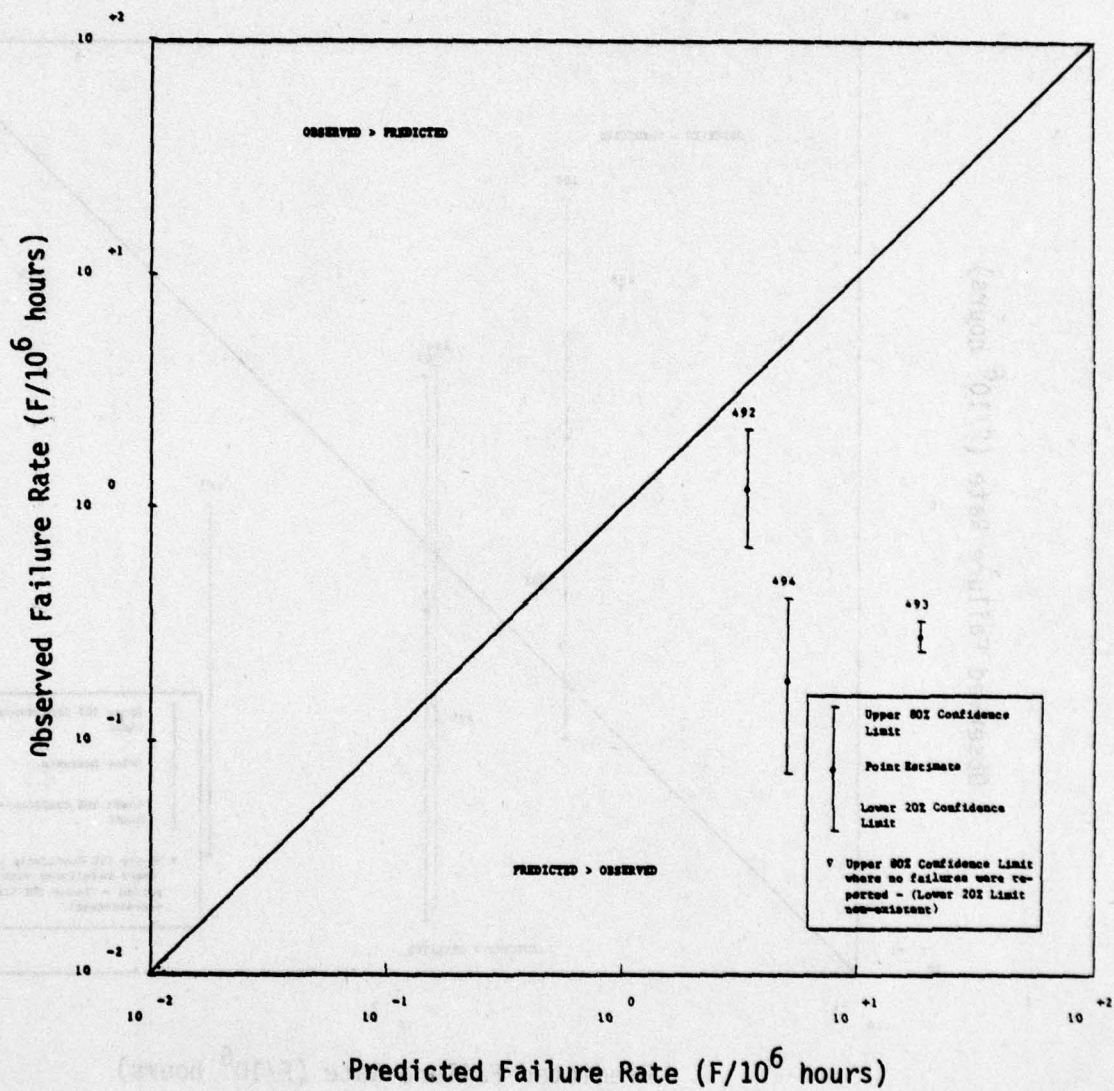


Figure 15: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Junction Temperatures of 51° to 75°C For PDIP Microcircuits

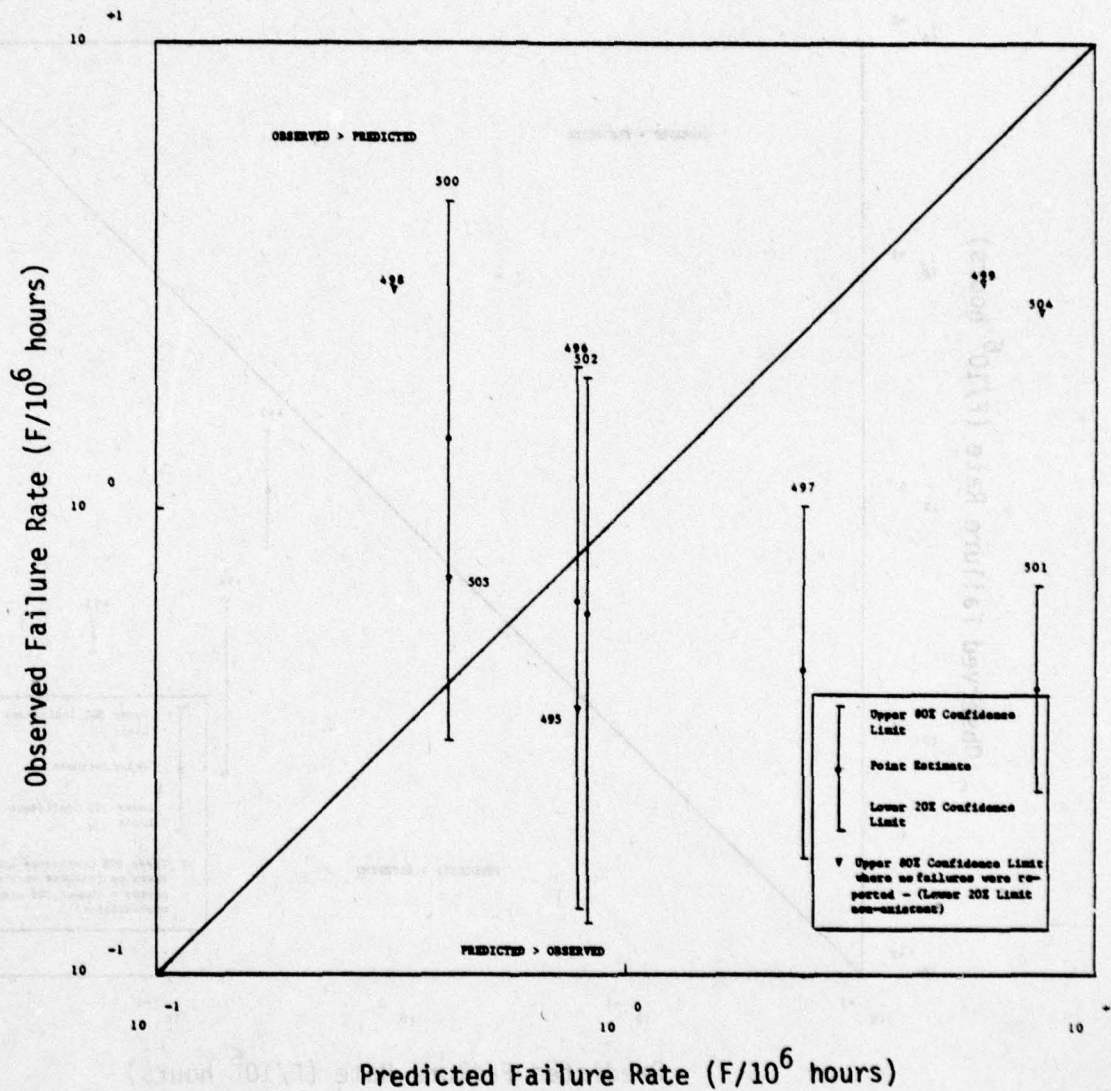


Figure 16: Digital Microcircuit Observed vs MIL-HDBK-217B Predicted Failure Rates For Junction Temperatures of 76°C to 100°C For SSI/MSI Microcircuits

SUMMARIZED GENERIC REPLACEMENT RATES - FIELD DATA

The prohibitive cost of a detailed failure analysis for every verified electronic device failure in equipments returned from or repaired in the field is not a justifiable expense to those manufacturers who are producing relatively low-cost products in high volume, particularly when the constraints of a government-funded contract are absent. These companies usually operate under their own internal guidelines for specifying product life, defined in terms of a warranty period, where the success of the equipment design and performance is measured in the percentage of units returned during a given interval of the warranty period. Beyond this warranty, the return rates may or may not be monitored.

Once the equipment is identified as having failed, the repair activity is initiated. This repair activity may involve the replacement of a defective module or printed circuit board, with the defective component being discarded, or it may actually be repaired, with the suspected failed devices being removed and replaced with functional electronic devices. The replaced parts are then documented and tabulated to determine the percentage of overall device replacements during the specified calendar time period. Further analysis may or may not be accomplished to pinpoint the primary device failures, the secondary device failures, or whether the device has even failed.

The mathematical relationships between device replacement rates and verified (or primary) failure rates have not been extensively addressed and for good reason. Due to the number of variable conditions involved, the difficulty in hypothesizing even a reasonable guess as to the interdependency of the two values becomes apparent. Electronic device failure rates, although influenced by design principles, are more a function of the thermal and mechanical stresses of the intended application environment, as well as the actual physics of the device. Replacement rate values for a given device are also dependent upon these factors but are more directly related to the philosophies of each manufacturer's field service activities. Included among these intangibles are the extent to which failed items are returned for repair

(the cheaper the product, the greater the possibility that a failure may not be reported and the unit is discarded), the degree to which an equipment is repaired (board-swapping, as opposed to part replacement), and, if a part is actually replaced, the effort expended in analysis to categorize the device as a primary or secondary failure, or a good device. Obviously, generic replacement rates are destined to be unique for each manufacturer, based upon their design principles, repair philosophies, and the skills of the personnel involved throughout the entire manufacturing chain.

The basic intent of this subsection, then, is to introduce and encourage the reporting of replacement rates, in this case for generic categories of digital microcircuits, as a means of comparison between personal experience and community experience. It is intended that this subsection should grow to encompass data from all application environments and over a wide spectrum of stress conditions, for only in this way will these data expand into a useful resource for reference and comparison.

At this point, the reader is asked to review the definitions of failure rate and replacement rate given in "Definitions of Terms, Statistical Methods, and Abbreviations Used in the Data Analysis" on page 3. It should be apparent that the optimum replacement rate will approach the theoretical failure rate for any given device. Replacement rates, however, may also reflect engineering change actions, involving equipment or device updating, or preventive maintenance actions, where devices are removed just prior to their anticipated time of failure. While ideal preventive maintenance replacement rates would reflect a one-at-a-time device removal, this is admittedly a very unrealistic concept and would most likely exceed the costs of a regularly scheduled periodic equipment maintenance action or a field and/or in-house repair action. The data included herein have been screened to exclude these two categories of replacements.

Turning now to the data, Tables 30 through 33 are all based upon field environments roughly equivalent to Ground, Benign, Commercial (GBC) and screened to a quality level of N (or D per MIL-HDBK-217B). Table 30 lists replacement rates by device operational type, while Table 31 treats the same

data according to package type distributions. Although remembering that replacement rates do not, as yet, reflect a definite relationship to failure rates, ratios between replacement rates may reveal pertinent comparisons between operational types or package types that can be compared to failure rate ratios of the same device parameters. For instance, the failure rate ratio of HTTL microcircuits to STTL devices from Table 2, page 16, is 1.2 which compares favorably to the replacement rate ratio of 1.3 for these same generic categories (Table 30, page 90). Similarly, as a comparison between HDIP and HFPK package types, the replacement rate and failure rate ratios are found to be 4.83 and 4.65, respectively. As more data is accumulated, these types of analyses will become more meaningful. It is interesting to note from Table 30 that the replacement rate for LTTL devices is rather high relative to those of the other bipolar categories. Table 31 reveals a higher replacement rate for HDIP devices compared to PDIP microcircuits.

Table 32 further handles the package type replacement rate relationships by relating the influences of operating junction temperatures and operational types. Once again, the LTTL microcircuit entries stand out as being comparatively high to the remaining bipolar categories, regardless of package type and junction temperature.

Finally, Table 33 provides the complete set of generic line entries available as replacement rate data. The presentation of each entry according to operational type, application environment, screen class, package type, gate complexity and operational junction temperature provides maximum visibility into the factors affecting each individual device replacement rate. It should be noted that, where no replacements were reported, and 80% upper confidence level was calculated according to the Chi-squared distribution using $2(r_R + 1)$ degrees of freedom, where r_R is defined as the number of reported replacements.

TABLE 30: FIELD REPLACEMENT RATES BY OPERATIONAL TYPE

OPERATIONAL TYPE	PART HOURS	NUMBER REPLACED	REPLACEMENT RATE (R/10 ⁶ Hours)
CMOS	719,346,158	343	0.48
DTL	419,840,590	124	0.30
ECL	527,727,750	183	0.35
HTTL	340,956,750	78	0.23
LTTL	1,872,978,368	1210	0.65
RTL	10,515,050	11	1.0
STTL	697,547,509	218	0.31
LSTTL	1,218,757,860	229	0.19
TTL	5,130,608,905	1583	0.31

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MICROCIRCUIT DEVICE RELIABILITY DIGITAL FAILURE RATE DATA. SUMM--ETC(U)

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The microfiche card displays a grid of 140 frames, organized into 10 rows and 14 columns. Each frame contains a different set of data related to microcircuit device reliability. The data includes:

- Textual information, possibly device specifications or test procedures.
- Tables of numerical data, likely failure rates or test results.
- Graphs or plots, possibly showing failure rate trends over time or across different conditions.

The frames are arranged in a regular grid, with each frame occupying a small, rectangular area of the card. The data is presented in a clear, legible format, suitable for automated data processing and analysis.

TABLE 31: FIELD REPLACEMENT RATES BY PACKAGE TYPE

PACKAGE TYPE	PART HOURS	NUMBER REPLACED	REPLACEMENT RATE (R/10 ⁶ Hours)
HDIP	130,339,500	75	0.58
HFPK	8,646,950	0	0.12
PDIP	10,796,957,040	3902	0.36
CAN	2,335,450	2	0.86

TABLE 32: SUMMARIZED GENERIC REPLACEMENT RATES (BY PACKAGE TYPE)
FIELD WARRANTY DATA

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER REPLACED	REPLACEMENT RATE ($R/10^6$ Hours)
HDIP	<u>COMBINED</u>	<u>COMBINED</u>	<u>130,339,500</u>	<u>75</u>	<u>0.58</u>
		<u>COMBINED</u>	<u>130,339,500</u>	<u>75</u>	<u>0.58</u>
	51-75	CMOS	44,024,050	16	0.36
		ECL	30,545,450	26	0.85
		LTTL	1,210,300	3	2.5
		STTL	49,422,100	26	0.53
		LSTTL	479,700	0	2.1
		TTL	4,657,900	4	0.86
		<u>COMBINED</u>	<u>8,646,950</u>	<u>0</u>	<u>0.12</u>
		<u>COMBINED</u>	<u>8,646,950</u>	<u>0</u>	<u>0.12</u>
		TTL	8,646,950	0	0.12
PDIP	<u>COMBINED</u>	<u>COMBINED</u>	<u>10,796,957,040</u>	<u>3902</u>	<u>0.36</u>
		<u>COMBINED</u>	<u>345,932,000</u>	<u>317</u>	<u>0.92</u>
	26-50	LTTL	234,013,500	244	1.0
		TTL	111,918,500	73	0.65
	51-75	<u>COMBINED</u>	<u>10,451,025,040</u>	<u>3585</u>	<u>0.34</u>
		CMOS	675,322,108	327	0.48
		DTL	417,505,140	122	0.29
		ECL	497,182,300	157	0.32
		HTTL	340,956,750	78	0.23
		LTTL	1,637,754,568	963	0.59
		RTL	10,515,050	11	1.0

TABLE 32: SUMMARIZED GENERIC REPLACEMENT RATES (BY PACKAGE TYPE)
FIELD WARRANTY DATA (Cont'd)

PACKAGE TYPE	JUNCTION TEMPERATURE T_j (°C)	OPERATIONAL TYPE	PART HOURS	NUMBER REPLACED	REPLACEMENT RATE (R/10 ⁶ Hours)
PDIP (Cont'd)	51-75 (Cont'd)	STTL	648,125,409	192	0.30
		LSTTL	1,218,278,160	229	0.19
		TTL	5,005,385,555	1506	0.30
CAN	COMBINED 51-75	COMBINED	2,335,450	2	0.86
		COMBINED	2,335,450	2	0.86
		DTL	2,335,450	2	0.86

TABLE 33: GENERIC REPLACEMENT RATES
FIELD WARRANTY DATA

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS	NUMBER REPLACED	REPLACEMENT RATE (R/10 ⁶ Hours)
CMOS	GBC	N	HDIP	1-10	51-75	21,183,700	7	0.33
			HDIP	11-25	51-75	3,560,700	0	0.28
			HDIP	26-50	51-75	8,835,450	2	0.23
			HDIP	51-75	51-75	3,292,900	5	1.5
			HDIP	76-100	51-75	7,151,300	2	0.28
			PDIP	1-10	51-75	320,400,750	137	0.43
			PDIP	11-25	51-75	165,715,008	91	0.55
			PDIP	26-50	51-75	110,892,400	68	0.61
			PDIP	51-75	51-75	38,114,700	13	0.34
			PDIP	76-100	51-75	40,199,250	18	0.45
			PDIP	1-10	51-75	416,184,990	121	0.29
			PDIP	11-25	51-75	1,320,150	1	0.76
			CAN	1-10	51-75	2,335,450	2	0.86
DTL	GBC	N	HDIP	1-10	51-75	22,205,300	16	0.72
			HDIP	11-25	51-75	5,654,350	8	1.4
			HDIP	26-50	51-75	1,357,200	1	0.74
			HDIP	76-100	51-75	1,328,600	1	0.75
			PDIP	1-10	51-75	402,723,750	131	0.33
			PDIP	11-25	51-75	93,128,650	26	0.28
			PDIP	26-50	51-75	1,329,900	0	0.75
			PDIP	1-10	51-75	283,656,650	68	0.24
			PDIP	11-25	51-75	57,300,100	10	0.17
			PDIP	11-25	51-75	1,210,300	3	2.5
HTTL	GBC	N	PDIP	1-10	26-50	162,792,000	151	0.93
			PDIP	11-25	51-75	659,983,110	485	0.73
			PDIP	11-25	51-75	50,872,500	49	0.96
			PDIP	11-25	51-75	601,932,224	330	0.55
			PDIP	26-50	51-75	20,349,000	44	2.2
			PDIP	26-50	51-75	276,692,850	102	0.37
			PDIP	51-75	51-75	99,146,384	46	0.46
			PDIP	1-10	51-75	10,515,050	11	1.0
			PDIP	1-10	51-75	10,515,050	11	1.0
			PDIP	1-10	51-75	10,515,050	11	1.0

TABLE 33: GENERIC REPLACEMENT RATES
FIELD WARRANTY DATA (Cont'd)

OPERATIONAL TYPE	APPLICATION ENVIRONMENT	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER OF PART HOURS	NUMBER REPLACED	REPLACEMENT RATE (R/10 ⁶ HOURS)
STTL	GBC	N	HDIP	11-25	51-75	24,987,300	11	0.44
		N	HDIP	51-75	51-75	24,434,800	15	0.61
		N	PDIP	1-10	51-75	424,786,059	87	0.20
		N	PDIP	11-25	51-75	212,173,000	100	0.47
		N	PDIP	26-50	51-75	11,115,000	5	0.45
		N	PDIP	51-75	51-75	51,350	0	--
LSTTL	GBC	N	HDIP	1-10	51-75	479,700	0	--
		N	PDIP	1-10	51-75	676,313,950	136	0.20
		N	PDIP	11-25	51-75	367,637,460	46	0.13
		N	PDIP	26-50	51-75	158,319,850	44	0.28
		N	PDIP	51-75	51-75	16,006,900	3	0.19
		N	PDIP	51-75	51-75	51-75	0	0.39
TTL	GBC	N	HDIP	1-10	51-75	2,597,400	0	1.9
		N	HDIP	11-25	51-75	2,060,500	4	0.12
		N	HFPK	1-10	51-75	8,646,950	0	0.65
		N	PDIP	1-10	26-50	101,744,000	66	0.22
		N	PDIP	1-10	51-75	2,996,011,772	663	0.32
		N	PDIP	11-25	51-75	1,391,327,640	450	0.69
		N	PDIP	26-50	26-50	10,174,500	7	0.82
		N	PDIP	26-50	51-75	434,954,143	357	0.20
		N	PDIP	51-75	51-75	182,759,850	36	--
		N	PDIP	76-100	51-75	332,150	0	--
		N	PDIP	76-100	51-75	332,150	0	--
		N	PDIP	76-100	51-75	332,150	0	--

SUMMARIZED GENERIC FAILURE RATES -
RELIABILITY DEMONSTRATION AND EQUIPMENT CHECKOUT DATA

The data summarized within Tables 34 through 41 reflect the device fall-out rate which results from in-house equipment-level testing. Once again a structured hierarchy has been established to allow both general and specific examination of the operational and device-oriented characteristics affecting the test results.

Specifically, Table 34 ["Summarized Generic Failure Rates - Reliability Demonstration and Equipment Checkout Data (By MIL-STD-781B Test Level)"] has been derived from Tables 36 through 41 to present device failure rates based upon the test conditions defined by the various levels of MIL-STD-781B as a direct function of operational type and screen class levels. Table 35, entitled "Summarized Generic Failure Rates - Reliability Demonstration and Equipment Checkout Data (By Gate Complexity)," also draws upon the resources of Tables 36 through 41 but groups its failure rate listing by gate complexity as a function of package type and MIL-STD-781B test levels. Analysis of these two tables will help to reveal the relationships between temperature cycling, vibration, and equipment on-off power cycling with varying physical device characteristics.

Tables 36 through 41 represent the failure rate performance of digital microcircuits categorized by operational type, screen class level, package type, gate complexity and junction temperature (T_j) as it relates to each unique test level of MIL-STD-781B. The test levels detailed by this military standard are briefly outlined as follows on the next page:

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SUMMARY OF MIL-STD-781B TEST LEVELS

Test Level	Temperature °C	Temperature Cycling	Vibration	Equipment On/Off Cycle
A	25 \pm 5	NONE	YES	YES
A-1	25 \pm 5	NONE	NONE	NONE
B	40 \pm 5	NONE	YES	YES
C	50 \pm 5-0	NONE	YES	YES
D	65 \pm 5	NONE	YES	YES
E	-54 to + 55	YES	YES	YES
F	-54 to + 71	YES	YES	YES
G	-54 to + 95	YES	YES	YES
H	-65 to + 71	YES	YES	YES
J	-54 to +125	YES	YES	YES
TCVIBPC*	AS DEFINED	YES	YES	YES

The absence of these defined MIL-STD-781B test levels within MIL-STD-781C will gradually increase the quantity of data within the TCVIBPC category. Stress levels for the TCVIBPC category (Table 41) have been indicated in order to distinguish between unique sets of test parameters.

The test results found within this subsection will prove useful as an indication of anticipated digital microcircuit fallout rates for those who are performing equipment-level tests, including Product Acceptance Testing (P.A.T.) or Reliability Assessment Testing (R.A.T.)

*defined as Temperature Cycle, Vibration and Power Cycle test, this category does not signify an official MIL-STD-781B test level.

TABLE 34: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY MIL-STD-781B LEVEL)

TEST LEVEL	OPERATIONAL TYPE	SCREEN CLASS	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
A-1	COMBINED	COMBINED	702,590,846	3	0.0021	0.0042	0.0078
	PMOS	COMBINED	95,092	0	--	--	--
		B-2	95,092	0	--	--	--
	DTL	COMBINED	2,280,620	0	--	--	0.71
		B-1 B-2	2,243,641 36,979	0 0	-- --	-- --	0.72 --
	ECL	COMBINED	195,824	0	--	--	--
		B-1 N	31,376 164,448	0 0	-- --	-- --	-- --
	HTTL	COMBINED	64,444,876	0	--	--	0.025
		B-1 B-2 N	64,005,524 383,914 55,438	0 0 0	-- -- --	-- -- --	0.025 -- --
	LTTL	COMBINED	1,805,396	0	--	--	0.89
		B-1 B-2	39,450 1,765,946	0 0	-- --	-- --	-- 0.91
	STTL	COMBINED	167,346,276	0	--	--	0.0096
		B-1	167,346,276	0	--	--	0.0096
	SUHL	COMBINED	2,675,394	1	0.083	0.37	1.1
		B-1 B-2	6,012 2,669,382	0 1	-- 0.084	-- 0.37	-- 1.1

TABLE 34: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY MIL-STD-781B LEVEL) (Cont'd)

TEST LEVEL	OPERATIONAL TYPE	SCREEN CLASS	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
A-1 (Cont'd)	TTL	COMBINED	463,747,368	2	0.0018	0.0043	0.0092
		B-1	347,523,347	2	0.0024	0.0058	0.012
		B-2	62,218,277	0	--	--	0.026
		C-1	13,409,088	0	--	--	0.12
		N	40,596,656	0	--	--	0.040
D	COMBINED DTL	COMBINED	683,096	0	--	--	2.4
		COMBINED	683,096	0	--	--	2.4
		C-1	683,096	0	--	--	2.4
E	COMBINED CMOS	COMBINED	19,523,498	222	11.	11.	12.
		COMBINED	2,984,157	14	3.6	4.7	6.1
	PMOS	B-1	2,984,157	14	3.6	4.7	6.1
		COMBINED	358,400	1	0.62	2.8	8.4
		B-2 to N	358,400	1	0.62	2.8	8.4
	DTL	COMBINED	459,401	0	--	--	--
		B-1	36,601	0	--	--	--
	ECL	B-2 to N	422,800	0	--	--	--
		COMBINED	33,750	0	--	--	--
		B-1	30,950	0	--	--	--
		B-2 to N	2,800	0	--	--	--

TABLE 34: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY MIL-STD-781B LEVEL) (Cont'd)

TEST LEVEL	OPERATIONAL TYPE	SCREEN CLASS	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
E (Cont'd)	HTTL	COMBINED	511,234	2	1.6	3.9	8.4
		B-1	282,134	0	--	--	--
		JB	10,000	0	--	--	--
	LITL	B-2 to N	219,100	2	3.8	9.1	20.
		COMBINED	1,039,668	1	0.21	0.96	2.9
		B-1	757,871	1	0.29	1.3	4.0
	STTL	JB	273,397	0	--	--	--
		B-2 to N	8,400	0	--	--	--
		COMBINED	656,592	0	--	--	2.5
	SUHL	B-1	656,592	0	--	--	2.5
		COMBINED	278,351	0	--	--	--
		B-1	278,351	0	--	--	--
	TTL	COMBINED	13,201,945	204	15.	15.	16.
		B-1	4,365,209	0	--	--	0.37
		JB	691,046	0	--	--	2.3
F	COMBINED	B-2	777,180	89	104.	115.	126.
		B-2 to N	6,732,750	115	16.	17.	19.
		N	635,760	0	--	--	2.5
	DTL	COMBINED	81,524,822	29	0.30	0.36	0.42
		COMBINED	5,849,578	0	--	--	0.28
		B-1	5,795,656	0	--	--	0.28
		JB	36,222	0	--	--	--
		C-1	17,700	0	--	--	--

TABLE 34: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY MIL-STD-781B LEVEL) (Cont'd)

TEST LEVEL	OPERATIONAL TYPE	SCREEN CLASS	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
F (Cont'd)	HTTL	COMBINED	1,631,239	2	0.51	1.2	2.6
		B-1	1,153,502	2	0.71	1.7	3.7
		JB	218,639	0	--	--	--
		B-2	2,700	0	--	--	--
		JB and B-2	71,960	0	--	--	--
	LTTL	B-2 to N	58,128	0	--	--	--
		C-1	126,310	0	--	--	--
		COMBINED	1,532,424	1	0.15	0.65	2.0
		B-1	1,132,707	0	--	--	1.4
		JB	9,369	0	--	--	--
STTL	STTL	JB and B-2	232,540	0	--	--	--
		B-2 to N	157,808	1	--	--	--
		COMBINED	38,678,489	0	--	--	0.042
		B-1	38,662,477	0	--	--	0.042
		B-2	1,620	0	--	--	--
	LSTTL	JB and B-2	14,392	0	--	--	--
		COMBINED	14,392	0	--	--	--
		JB and B-2	14,392	0	--	--	--
		COMBINED	326,230	0	--	--	--
		B-1	89,854	0	--	--	--
TTL	SUHL	JB and B-2	236,376	0	--	--	--
		COMBINED	33,492,470	26	0.65	0.78	0.93
		B-1	19,325,992	16	0.65	0.83	1.1
		JB	7,097,232	4	0.32	0.56	0.95
		B-1 or JB	481,782	2	1.7	4.2	8.9
	TTL	B-2	103,388	0	--	--	--
		COMBINED					
		B-1					
		JB					
		B-1 or JB					

TABLE 34: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY MIL-STD-781B LEVEL) (Cont'd)

TEST LEVEL	OPERATIONAL TYPE	SCREEN CLASS	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
F (Cont'd)	TTL (Cont'd)	JB and B-2 B-2 to N C-1 N	2,253,920	2	0.37	0.89	1.9
			1,027,703	1	0.22	0.97	2.9
			695,717	1	0.32	1.4	4.3
			2,506,736	0	--	--	0.64
H	COMBINED	COMBINED	3,221,088	0	--	--	0.50
			17,723	0	--	--	--
			17,723	0	--	--	--
	HTTL	COMBINED	214,037	0	--	--	--
			79,156	0	--	--	--
			134,881	0	--	--	--
	STTL	COMBINED	2,011,548	0	--	--	0.80
			2,011,548	0	--	--	0.80
			977,780	0	--	--	1.6
	TTL	COMBINED	449,564	0	--	--	--
			528,216	0	--	--	3.0
TCVIBPC	COMBINED	COMBINED	573,527	0	--	--	2.8
			2,941	0	--	--	--
	DTL	COMBINED	2,941	0	--	--	--
			3,394	0	--	--	--
	HTTL	COMBINED	3,394	0	--	--	--
			3,394	0	--	--	--

TABLE 34: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY MIL-STD-781B LEVEL) (Cont'd)

TEST LEVEL	OPERATIONAL TYPE	SCREEN CLASS	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
TCVIBPC (Cont'd)	LTTL	COMBINED	188,672	0	--	--	--
		B-1	188,672	0	--	--	--
	STTL	COMBINED	114,237	0	--	--	--
		B-1	114,237	0	--	--	--
	TTL	COMBINED	264,283	0	--	--	--
		B-1	264,283	0	--	--	--

TABLE 35: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY GATE COMPLEXITY)

NUMBER OF GATES	PACKAGE TYPE	TEST LEVEL	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
1-10	COMBINED	COMBINED	536,570,993	128	0.22	0.24	0.26
	HDIP	COMBINED	115,661,338	116	0.92	1.0	1.1
		A-1	93,141,806	0	--	--	0.17
		D	683,096	0	--	--	2.4
		E	8,085,173	102	12.	13.	14.
		F	13,541,495	14	0.80	1.0	1.3
		TCVIBPC	209,768	0	--	--	--
	HFPK	COMBINED	420,875,764	12	0.021	0.029	0.038
		A-1	364,749,451	3	0.0042	0.0082	0.015
		E	1,629,923	0	--	--	0.99
11-25		F	51,667,392	9	0.12	0.17	0.24
		H	2,828,998	0	--	--	0.57
	CAN	COMBINED	33,891	0	--	--	--
		E	30,950	0	--	--	--
		TCVIBPC	2,941	0	--	--	--
	COMBINED	COMBINED	201,736,096	79	0.35	0.39	0.43
	HDIP	COMBINED	59,819,772	77	1.2	1.3	1.4
		A-1	47,344,111	0	--	--	0.034
		E	4,541,715	72	14.	16.	18.
		F	7,786,695	5	0.40	0.64	1.0
		H	3,605	0	--	--	--
		TCVIBPC	143,646	0	--	--	--
	HFPK	COMBINED	141,916,324	2	0.0058	0.014	0.030
		A-1	137,635,416	0	--	--	0.012
		E	115,620	2	--	--	--

TABLE 35: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY GATE COMPLEXITY) (Cont'd)

NUMBER OF GATES	PACKAGE TYPE	TEST LEVEL	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
11-25 (Cont'd)	HFPK	F H	4,110,614 54,674	0 0	-- --	-- --	0.39 --
26-50	COMBINED	COMBINED	62,972,955	5	0.049	0.079	0.13
	HDIP	COMBINED	31,040,575	5	0.10	0.16	0.25
		A-1	25,901,899	0	--	--	0.062
		E	2,813,332	5	1.1	1.8	2.8
		F	2,173,141	0	--	--	0.74
		TCVIBPC	152,203	0	--	--	--
	HFPK	COMBINED	31,932,380	0	--	--	0.050
		A-1	30,374,609	0	--	--	0.053
		E	178,510	0	--	--	--
		F	1,160,028	0	--	--	1.4
		H	219,233	0	--	--	--
51-75	COMBINED	COMBINED	6,682,306	42	5.5	6.3	7.2
	HDIP	COMBINED	5,345,321	42	6.8	7.9	9.1
		A-1	2,907,899	0	--	--	--
		E	1,986,061	41	18.	21.	24.
		F	386,392	1	0.58	2.6	7.7
		TCVIBPC	64,969	0	--	--	--
	PDIP	COMBINED	2,042	0	--	--	--
		E	2,042	0	--	--	--
	HFPK	COMBINED	1,334,943	0	--	--	1.2
		A-1	535,655	0	--	--	3.0
		E	44,185	0	--	--	--

TABLE 35: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
(BY GATE COMPLEXITY) (Cont'd)

NUMBER OF GATES	PACKAGE TYPE	TEST LEVEL	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
51-75 (Cont'd)	HFPK (Cont'd)	F	640,525	0	--	--	2.5
		H	114,578	0	--	--	--
76-100	COMBINED	COMBINED	154,527	0	--	--	--
		COMBINED	154,527	0	--	--	--
	HOIP	E	95,987	0	--	--	--
		F	58,540	0	--	--	--

TABLE 36: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL A-1

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
PMOS	B-2	HDIP	11-25	26-50	95,092	0	--	--	--
DTL	B-1	HDIP	1-10	26-50	128,450	0	--	--	--
	B-1	HFPK	1-10	26-50	1,982,927	0	--	--	0.81
	B-1	HFPK	11-25	26-50	132,264	0	--	--	--
	B-2	HFPK	1-10	26-50	21,131	0	--	--	--
	B-2	HFPK	1-10	51-75	15,848	0	--	--	--
ECL	B-1	HDIP	11-25	76-100	15,688	0	--	--	--
	B-1	HFPK	1-10	51-75	15,688	0	--	--	--
	N	HDIP	1-10	26-50	164,448	0	--	--	--
HTTL	B-1	HFPK	1-10	26-50	57,735,124	0	--	--	0.028
	B-1	HFPK	11-25	26-50	6,270,400	0	--	--	0.26
	B-2	HDIP	1-10	26-50	74,714	0	--	--	--
	B-2	HDIP	11-25	26-50	309,200	0	--	--	--
	N	HDIP	11-25	51-75	55,438	0	--	--	--
	B-1	HDIP	26-50	26-50	39,450	0	--	--	--
LTTL	B-2	HDIP	1-10	26-50	22,594	0	--	--	--
	B-2	HFPK	1-10	26-50	1,362,985	0	--	--	1.2
	B-2	HFPK	11-25	26-50	174,335	0	--	--	--
	B-2	HFPK	26-50	26-50	174,335	0	--	--	--
	B-2	HFPK	51-75	26-50	31,697	0	--	--	--
	B-1	HDIP	1-10	26-50	801,276	0	--	--	2.0
STTL	B-1	HDIP	11-25	26-50	641,200	0	--	--	2.5
	B-1	HFPK	1-10	26-50	118,850,000	0	--	--	0.014
	B-1	HFPK	11-25	26-50	46,800,500	0	--	--	0.034
	B-1	HFPK	11-25	51-75	253,300	0	--	--	--
	B-1	HFPK	11-25	26-50	6,012	0	--	--	--
SUHL	B-2	HFPK	1-10	26-50	2,058,729	1	0.11	0.49	1.5
	B-2	HFPK	11-25	26-50	393,228	0	--	--	--
	B-2	HFPK	11-25	51-75	217,425	0	--	--	--

TABLE 36: SUMMARIZED GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL A-1 (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
TTL	B-1	HDIP	1-10	26-50	31,622,008	0	--	--	0.051
	B-1	HDIP	1-10	51-75	7,834	0	--	--	--
	B-1	HDIP	11-25	26-50	15,365,945	0	--	--	0.10
	B-1	HDIP	26-50	26-50	1,538,589	0	--	--	1.0
	B-1	HDIP	26-50	51-75	197,692	0	--	--	--
	B-1	HDIP	51-75	26-50	163,282	0	--	--	--
	B-1	HDIP	51-75	51-75	2,744,617	0	--	--	--
	B-1	HFPK	1-10	26-50	182,268,718	2	0.0045	0.011	0.59
	B-1	HFPK	11-25	26-50	74,896,304	0	--	--	0.023
	B-1	HFPK	11-25	51-75	8,190,612	0	--	--	0.021
	B-1	HFPK	26-50	51-75	21,734,806	0	--	--	0.20
	B-1	HFPK	26-50	76-100	8,384,074	0	--	--	0.074
	B-1	HFPK	51-75	51-75	408,866	0	--	--	0.19
	B-2	HDIP	1-10	26-50	40,437,552	0	--	--	--
	B-2	HDIP	11-25	26-50	48,664	0	--	--	0.040
	B-2	HDIP	26-50	26-50	1,738	0	--	--	--
	B-2	HDIP	26-50	51-75	18,144,700	0	--	--	0.089
	B-2	HDIP	26-50	76-100	2,669,800	0	--	--	0.60
	B-2	HFPK	1-10	26-50	438,301	0	--	--	--
	B-2	HFPK	11-25	26-50	174,344	0	--	--	--
	B-2	HFPK	11-25	51-75	126,692	0	--	--	--
	B-2	HFPK	26-50	51-75	81,394	0	--	--	--
	B-2	HFPK	51-75	76-100	95,092	0	--	--	--
	C-1	HDIP	1-10	51-75	3,870,888	0	--	--	0.42
	C-1	HDIP	1-10	76-100	3,250,632	0	--	--	0.50
	C-1	HDIP	11-25	51-75	898,296	0	--	--	1.8
	C-1	HDIP	11-25	76-100	2,245,656	0	--	--	0.72
	C-1	HDIP	26-50	26-50	278,040	0	--	--	--
	C-1	HDIP	26-50	76-100	2,395,176	0	--	--	0.67
	C-1	HDIP	26-50	101-125	470,400	0	--	--	--
	N	HDIP	1-10	26-50	12,761,410	0	--	--	0.13
	N	HDIP	11-25	26-50	27,668,932	0	--	--	0.058
	N	HDIP	26-50	51-75	166,314	0	--	--	--

TABLE 37: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL D

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DTL	C-1	HDIP	1-10	51-75	62,840	0	--	--	--
	C-1	HDIP	1-10	76-100	620,256	0	--	--	2.6

TABLE 38: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL E

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
CMOS	B-1	HDIP	1-10	51-75	899,055	1	0.25	1.1	3.3
	B-1	HDIP	11-25	51-75	641,520	2	1.3	3.1	6.7
	B-1	HDIP	26-50	51-75	91,410	0	--	--	--
	B-1	HDIP	51-75	51-75	1,276,501	11	6.4	8.6	12.
	B-1	HDIP	51-75	76-100	16,120	0	--	--	--
	B-1	HDIP	76-100	51-75	57,551	0	--	--	--
	B-1	HFPK	11-25	51-75	2,000	0	--	--	--
	B-2 to N	HDIP	11-25	51-75	358,400	1	0.62	2.8	8.4
	B-1	HDIP	1-10	51-75	36,601	0	--	--	--
	B-2 to N	HDIP	1-10	51-75	190,400	0	--	--	--
DTL	B-2 to N	HFPK	1-10	51-75	215,600	0	--	--	--
	B-2 to N	HFPK	26-50	51-75	16,800	0	--	--	--
	B-1	CAN	1-10	51-75	30,950	0	--	--	--
	B-2 to N	HFPK	1-10	51-75	2,800	0	--	--	--
HTTL	B-1	HDIP	1-10	51-75	129,006	0	--	--	--
	B-1	HDIP	1-10	76-100	59,432	0	--	--	--
	B-1	HDIP	11-25	51-75	21,411	0	--	--	--
	B-1	HDIP	11-25	76-100	72,285	0	--	--	--
	JB	HDIP	1-10	51-75	10,000	0	--	--	--
	B-2 to N	HDIP	1-10	51-75	210,700	2	3.9	9.5	20.
	B-2 to N	HDIP	11-25	51-75	8,400	0	--	--	--

TABLE 38: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL E (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
LTL	B-1	HDIP	1-10	51-75	331,433	0	--	--	--
	B-1	HDIP	11-25	51-75	46,060	0	--	--	--
	B-1	HDIP	26-50	51-75	173,774	0	--	--	--
	B-1	HDIP	51-75	76-100	15,060	0	--	--	--
	B-1	HFPK	11-25	51-75	83,768	1	--	--	--
	B-1	HFPK	26-50	51-75	77,591	0	--	--	--
	B-1	HFPK	51-75	76-100	30,185	0	--	--	--
	JB	HDIP	1-10	51-75	142,000	0	--	--	--
	JB	HDIP	11-25	51-75	2,000	0	--	--	--
	JB	HFPK	1-10	51-75	66,408	0	--	--	--
	JB	HFPK	26-50	76-100	62,989	0	--	--	--
	B-2 to N	HDIP	26-50	76-100	8,400	0	--	--	--
STTL	B-1	HDIP	11-25	51-75	310,659	0	--	--	--
	B-1	HDIP	26-50	51-75	344,641	0	--	--	--
	B-1	HDIP	51-75	76-100	1,292	0	--	--	--
SUHL	B-1	HDIP	1-10	51-75	64,480	0	--	--	--
	B-1	HDIP	11-25	51-75	48,360	0	--	--	--
	B-1	HDIP	26-50	51-75	165,511	0	--	--	--
TTL	B-1	HDIP	1-10	51-75	684,526	0	--	--	2.4
	B-1	HDIP	11-25	51-75	1,221,971	0	--	--	1.3
	B-1	HDIP	11-25	76-100	73,599	0	--	--	--
	B-1	HDIP	26-50	51-75	389,427	0	--	--	--
	B-1	HDIP	26-50	76-100	527,318	0	--	--	3.1
	B-1	HDIP	26-50	101-125	3,951	0	--	--	--
	B-1	HDIP	51-75	76-100	148,474	0	--	--	--
	B-1	HDIP	51-75	101-125	5,814	0	--	--	--
	B-1	HDIP	76-100	101-125	38,436	0	--	--	--
	B-1	PDIP	51-75	76-100	2,042	0	--	--	--
	B-1	HFPK	1-10	51-75	1,260,639	0	--	--	1.3
	B-1	HFPK	11-25	51-75	9,012	0	--	--	--
	JB	HDIP	1-10	51-75	355,000	0	--	--	--
	JB	HDIP	11-25	51-75	169,000	0	--	--	--
	JB	HDIP	26-50	76-100	61,000	0	--	--	--

TABLE 38: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL E (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _J (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
TTL (Cont'd)	JB	HDIP	51-75	76-100	2,000	0	--	--	--
	JB	HFPK	1-10	51-75	78,876	0	--	--	--
	JB	HFPK	11-25	51-75	4,040	0	--	--	--
	JB	HFPK	26-50	76-100	21,130	0	--	--	--
	B-2	HDIP	1-10	51-75	777,120	89	104.	115.	126.
	B-2 to N	HDIP	1-10	51-75	4,169,400	10	1.7	2.4	3.3
	B-2 to N	HDIP	11-25	51-75	1,401,800	48	30.	34.	39.
	B-2 to N	HDIP	11-25	76-100	166,250	21	103.	126.	155.
	B-2 to N	HDIP	26-50	51-75	490,000	5	6.3	10.	16.
	B-2 to N	HDIP	51-75	76-100	468,900	30	54.	64.	76.
	B-2 to N	HFPK	1-10	51-75	5,600	0	--	--	--
	B-2 to N	HFPK	11-25	51-75	16,800	1	--	--	--
	B-2 to N	HFPK	51-75	76-100	14,000	0	--	--	--
	N	HDIP	1-10	51-75	12,980	0	--	--	--
	N	HDIP	1-10	76-100	12,980	0	--	--	--
	N	HDIP	26-50	76-100	557,900	0	--	--	--
	N	HDIP	51-75	76-100	51,900	0	--	--	--

TABLE 39: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL F

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DTL	B-1	HDIP	1-10	76-100	8,730	0	--	--	--
	B-1	HDIP	11-25	76-100	137,888	0	--	--	--
	B-1	HFPK	1-10	51-75	3,954,236	0	--	--	0.41
	B-1	HFPK	1-10	76-100	36,574	0	--	--	--
	B-1	HFPK	11-25	51-75	1,658,228	0	--	--	0.97
	JB	HFPK	1-10	76-100	36,222	0	--	--	--
	C-1	HFPK	1-10	51-75	7,350	0	--	--	--
	C-1	HFPK	1-10	76-100	8,550	0	--	--	--
	C-1	HFPK	1-10	101-125	1,800	0	--	--	--
	B-1	HDIP	1-10	51-75	46,080	0	--	--	--
	B-1	HDIP	1-10	76-100	147,057	2	--	--	--
	B-1	HDIP	11-25	76-100	227,673	0	--	--	--
	B-1	HFPK	1-10	51-75	150,748	0	--	--	--
	B-1	HFPK	1-10	76-100	449,295	0	--	--	--
HTTL	B-1	HFPK	11-25	76-100	132,649	0	--	--	--
	JB	HDIP	1-10	76-100	218,639	0	--	--	--
	B-2	HFPK	1-10	76-100	540	0	--	--	--
	B-2	HFPK	11-25	76-100	2,160	0	--	--	--
	JB and B-2	HDIP	1-10	76-100	43,176	0	--	--	--
	JB and B-2	HDIP	11-25	76-100	28,784	0	--	--	--
	B-2 to N	HDIP	1-10	76-100	58,128	0	--	--	--
	C-1	HFPK	1-10	51-75	4,350	0	--	--	--
	C-1	HFPK	1-10	76-100	121,960	0	--	--	--
	B-1	HDIP	1-10	51-75	10,040	0	--	--	--
	B-1	HDIP	1-10	76-100	181,000	0	--	--	--
	B-1	HDIP	11-25	51-75	23,790	0	--	--	--
	B-1	HDIP	11-25	76-100	151,792	0	--	--	--
	B-1	HDIP	26-50	76-100	100,252	0	--	--	--
LTL	B-1	HDIP	51-75	76-100	55,220	0	--	--	--
	B-1	HFPK	1-10	76-100	148,499	0	--	--	--
	B-1	HFPK	11-25	76-100	199,502	0	--	--	--
	B-1	HFPK	11-25	76-100		0	--	--	--

TABLE 39: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL F (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
L TTL (Cont'd)	B-1	HFPK	26-50	76-100	81,500	0	--	--	--
	B-1	HFPK	51-75	76-100	181,112	0	--	--	--
	JB	HDIP	1-10	76-100	3,332	0	--	--	--
	JB	HFPK	1-10	76-100	6,037	0	--	--	--
	JB and B-2	HDIP	11-25	76-100	100,744	0	--	--	--
	JB and B-2	HDIP	51-75	76-100	131,796	0	--	--	--
	B-2 to N	HDIP	11-25	51-75	77,616	0	--	--	--
	B-2 to N	HDIP	51-75	76-100	80,192	1	--	--	--
	B-1	HDIP	1-10	51-75	23,403	0	--	--	--
	B-1	HDIP	1-10	76-100	4,082	0	--	--	--
STTL	B-1	HDIP	11-25	76-100	24,492	0	--	--	0.042
	B-1	HFPK	1-10	51-75	38,610,500	0	--	--	--
	B-2	HFPK	1-10	76-100	1,080	0	--	--	--
	B-2	HFPK	11-25	76-100	540	0	--	--	--
	JB and B-2	HDIP	1-10	76-100	14,392	0	--	--	--
	JB and B-2	HDIP	11-25	76-100	14,392	0	--	--	--
	B-1	HFPK	1-10	76-100	14,480	0	--	--	--
	B-1	HFPK	11-25	76-100	75,374	0	--	--	--
	JB and B-2	HDIP	1-10	76-100	236,376	0	--	--	--
	B-1	HDIP	1-10	51-75	1,451,850	1	0.15	0.69	2.1
LSTTL	B-1	HDIP	1-10	76-100	5,100,686	8	1.1	1.6	2.2
	B-1	HDIP	11-25	76-100	3,301,369	1	0.068	0.30	0.91
	B-1	HDIP	11-25	101-125	25,847	0	--	--	--
	B-1	HDIP	26-50	76-100	1,733,549	0	--	--	0.46
	B-1	HDIP	26-50	101-125	23,766	0	--	--	--
	B-1	HDIP	51-75	76-100	53,023	0	--	--	--
	B-1	HDIP	51-75	101-125	66,161	0	--	--	--
	B-1	HDIP	76-100	76-100	58,540	0	--	--	--
	B-1	HFPK	1-10	51-75	123,465	0	--	--	--
	B-1	HFPK	1-10	76-100	5,098,478	6	0.77	1.2	1.8
TTL	B-1	HFPK	1-10	126-150	55,220	0	--	--	--

TABLE 39: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL F (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PARTS HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
TTL (Cont'd)	B-1	HFPK	11-25	76-100	961,892	0	--	--	1.7
	B-1	HFPK	11-25	101-125	72,048	0	--	--	--
	B-1	HFPK	26-50	76-100	440,941	0	--	--	--
	B-1	HFPK	26-50	101-125	382,558	0	--	--	--
	B-1	HFPK	26-50	126-150	31,636	0	--	--	--
	B-1	HFPK	51-75	76-100	320,315	0	--	--	--
	B-1	HFPK	51-75	101-125	24,648	0	--	--	--
	JB	HDIP	1-10	76-100	5,251,193	2	0.16	0.38	0.81
	JB	HDIP	11-25	76-100	1,434,328	2	0.57	1.4	3.0
	JB	HDIP	26-50	76-100	11,662	0	--	--	--
	JB	HFPK	1-10	76-100	6,666	0	--	--	--
	JB	HFPK	11-25	76-100	389,388	0	--	--	--
	JB	HFPK	26-50	76-100	3,995	0	--	--	--
	B-1 or JB	HFPK	1-10	76-100	481,782	2	1.7	4.2	8.9
	B-2	HFPK	1-10	76-100	11,880	0	--	--	--
	B-2	HFPK	11-25	76-100	71,180	0	--	--	--
	B-2	HFPK	26-50	76-100	4,860	0	--	--	--
	B-2	HFPK	26-50	101-125	15,468	0	--	--	--
	JB and B-2	HDIP	1-10	76-100	259,056	1	0.86	3.9	12
	JB and B-2	HDIP	11-25	76-100	1,865,336	1	0.12	0.54	1.6
	JB and B-2	HDIP	26-50	76-100	129,528	0	--	--	--
	B-2 to N	HDIP	1-10	76-100	484,275	0	--	--	--
	B-2 to N	HDIP	11-25	76-100	369,044	1	0.60	2.7	8.1
	B-2 to N	HDIP	26-50	76-100	174,384	0	--	--	--
	C-1	HDIP	11-25	76-100	3,600	0	--	--	--
	C-1	HFPK	1-10	51-75	53,100	0	--	--	--
	C-1	HFPK	1-10	76-100	277,050	1	0.80	3.6	11.0
	C-1	HFPK	11-25	76-100	154,667	0	--	--	--
	C-1	HFPK	11-25	101-125	46,350	0	--	--	--
	C-1	HFPK	26-50	101-125	10,200	0	--	--	--
	C-1	HFPK	26-50	126-150	36,300	0	--	--	--
	C-1	HFPK	51-75	101-125	76,800	0	--	--	--
	C-1	HFPK	51-75	126-150	37,650	0	--	--	--
	N	HFPK	1-10	51-75	563,812	0	--	--	2.9
	N	HFPK	1-10	76-100	1,443,718	0	--	--	1.1
	N	HFPK	11-25	76-100	346,636	0	--	--	--
	N	HFPK	26-50	101-125	152,570	0	--	--	--

TABLE 40: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
MIL-STD-781B, LEVEL H

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DTL	C-1	HFPK	1-10	51-75	7,360	0	--	--	--
	C-1	HFPK	1-10	76-100	8,561	0	--	--	--
	C-1	HFPK	1-10	101-125	1,802	0	--	--	--
HTTL	B-1	HFPK	1-10	51-75	79,156	0	--	--	--
	C-1	HFPK	1-10	51-75	4,356	0	--	--	--
	C-1	HFPK	1-10	76-100	122,264	0	--	--	--
	C-1	HFPK	11-25	76-100	8,261	0	--	--	--
STTL	B-1	HFPK	1-10	51-75	2,011,548	0	--	--	0.80
TTL	B-1	HFPK	1-10	51-75	276,892	0	--	--	--
	B-1	HFPK	26-50	76-100	172,672	0	--	--	--
	C-1	HOIP	11-25	76-100	3,605	0	--	--	--
	C-1	HFPK	1-10	51-75	53,158	0	--	--	--
	C-1	HFPK	1-10	76-100	263,901	0	--	--	--
	C-1	HFPK	11-25	101-125	46,413	0	--	--	--
	C-1	HFPK	26-50	101-125	10,213	0	--	--	--
	C-1	HFPK	26-50	126-150	36,348	0	--	--	--
	C-1	HFPK	51-75	101-125	76,878	0	--	--	--
	C-1	HFPK	51-75	126-150	37,700	0	--	--	--

TABLE 41: GENERIC FAILURE RATES
RELIABILITY DEMONSTRATION & EQUIPMENT CHECKOUT DATA
TCVIBPC

OP TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	T _j (°C)	NUMBER PART HOURS/ NUMBER FAILED	STRESS LEVELS	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DTL	B-1	CAN	1-10	51-75	2941/0	4°C/51°C 24CYC-95%	--	--	--
HTTL	B-1	HDIP	1-10	51-75	2828/0	4°C/51°C 24CYC-95%	--	--	--
	B-1	HDIP	11-25	51-75	566/0	" " " "	--	--	--
LTTL	B-1	HDIP	11-25	51-75	28,116/0	4°C/51°C 24CYC-95%	--	--	--
	B-1	HDIP	26-50	51-75	87,783/0	" " " "	--	--	--
	B-1	HDIP	26-50	76-100	29,665/0	" " " "	--	--	--
	B-1	HDIP	51-75	76-100	43,108/0	" " " "	--	--	--
STTL	B-1	HDIP	1-10	51-75	71,322/0	4°C/51°C 24CYC-95%	--	--	--
	B-1	HDIP	11-25	51-75	33,382/0	" " " "	--	--	--
	B-1	HDIP	51-75	76-100	9,533/0	" " " "	--	--	--
TTL	B-1	HDIP	1-10	51-75	135,618/0	4°C/51°C 24CYC-95%	--	--	--
	B-1	HDIP	11-25	51-75	81,582/0	" " " "	--	--	--
	B-1	HDIP	26-50	76-100	34,755/0	" " " "	--	--	--
	B-1	HDIP	51-75	76-100	12,328/0	" " " "	--	--	--

SUMMARIZED GENERIC FAILURE RATES - LIFE TEST DATA

Whereas the previous three subsections have been exclusively concerned with equipment-level, in-house testing (Tables 34 through 41) and observed field experience (Tables 1 through 33) as a means of examining digital microcircuit failure and replacement rates, the following tables are presented to allow maximum visibility into those factors influencing device lot reliability through part-level life testing. Careful examination of these tables will help facilitate the understanding of temperature and bias effects on long-term microcircuit reliability.

The data summarized herein have been obtained from the detailed computer listings presented in Section 2 of this publication and are collected from microcircuit vendors and users. Definitions for the terms and abbreviations used within the subsection may be reviewed in the "Definitions of Terms, Statistical Methods and Abbreviations Used in the Data Analysis" found on page

Table 42, entitled "Summarized Generic Failure Rates (By Test Type) - Life Test Data," partitions life test types into four unique categories: Dynamic, Reverse Bias, Static Forward Bias and Storage. Each of these device fallout rates is presented as a function of operational type and gate complexity in order to better facilitate comparisons between an operational type and its performance under each set of test conditions. Examination of this table indicates that CMOS microcircuits are particularly susceptible to the voltage stresses and elevated temperatures of Reverse Bias testing. To a lesser degree, this is also witnessed in the Dynamic life tests. On the other hand, ECL devices appear to have a degree of immunity to these Dynamic Tests relative to the performance of the other bipolar categories, while the Static Forward Bias test appears to yield more effective results for ECL, compared to other bipolar part types. Information on the remainder of the microcircuit operational types is inconclusive due to their consistency of performance between the various life test types or to the lack of supportive data to permit a meaningful conclusion. As a general category, however,

the bipolar devices exhibit a greater degree of responsiveness to the conditions of a Reverse Bias test when compared to the other test types. A more thorough discussion concerning part-level tests is available from a document entitled "Microcircuit Screening Effectiveness", RAC No. TRS-1, by H.C. Rickers. Details on this publication may be obtained by contacting the Reliability Analysis Center directly.

Table 43 groups the summarized life test data by screen class and is presented such that it illustrates the distribution of device package types and their associated fallout rates for each of the four previously defined test types at various stress levels within each quality grade. This table can be more effectively used to examine the susceptibility of a given package type to a specified test type or operating temperature range. Comparisons can also be made between the performance of an integrated circuit type within one screen class category and the performance of that device, under similar test stress levels, rated at a higher or lower screen class. Analysis of the data contained in Table 43 indicates that, independent of the screen class, package type or life test classification parameters, device fallout rates dramatically increase at test temperatures in excess of approximately 150°C.

Tables 44 through 47, which serve as a reference point for the summarization of the two tables discussed above, provide complete generic integrated circuit test results for each of the four major test categories: Dynamic (Table 44), Reverse Bias (Table 45), Static Forward Bias (Table 46) and Storage (Table 47). The line entries listed on each table are grouped according to operational type, screen class level, package type, gate complexity and operating test conditions. Within each test type, these tables supply the reader with maximum visibility into the dependence of each operational type fallout rate on variations in microcircuit construction and characterization, as well as on operating test conditions.

TABLE 42: SUMMARIZED GENERIC FAILURE RATES (BY TEST TYPE)
LIFE TEST DATA

TEST TYPE	OPERATIONAL TYPE	GATE COMPLEXITY	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DYNAMIC	COMBINED	COMBINED	286,729,772	401	1.3	1.4	1.5
	CMOS	COMBINED	7,698,000	128	15.	17.	18.
		1-10	6,605,314	111	15.	17.	18.
		26-50	959,686	17	14.	18.	22.
		51-75	133,000	0	--	--	--
	PMOS	COMBINED	944,500	2	0.87	2.1	4.5
		1-10	280,500	2	2.9	7.1	15.
		11-25	664,000	0	--	--	2.4
	DTL	COMBINED	90,447,200	99	1.0	1.1	1.2
		1-10	87,783,700	52	0.52	0.59	0.67
ECL		11-25	1,916,500	46	21.	24.	27.
		26-50	747,000	1	0.30	1.3	4.0
	COMBINED	COMBINED	68,843,000	17	0.20	0.25	0.31
		1-10	68,345,000	3	0.022	0.044	0.081
		11-25	452,000	14	24.	31.	40.
		26-50	46,000	0	--	--	--
	HTTL	COMBINED	4,053,000	3	0.38	0.74	1.4
		1-10	3,443,000	3	0.45	0.87	1.6
		11-25	610,000	0	--	--	2.6
	LTTL	COMBINED	1,657,500	30	15.	18.	21.
STTL		1-10	896,000	10	8.1	11.	15.
		11-25	657,500	14	16.	21.	28.
		26-50	104,000	6	--	--	--
	COMBINED	COMBINED	2,786,000	5	1.1	1.8	2.8

TABLE 42: SUMMARIZED GENERIC FAILURE RATES (BY TEST TYPE)
LIFE TEST DATA (Cont'd)

TEST TYPE	OPERATIONAL TYPE	GATE COMPLEXITY	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DYNAMIC (Cont'd)	STTL (Cont'd)	1-10	2,402,000	4	0.96	1.7	2.8
		11-25	384,000	1	0.58	2.6	7.8
	LSTTL	COMBINED	3,399,740	6	1.1	1.8	2.7
		1-10 51-75	3,317,740 82,000	6 0	1.2 --	1.8 --	2.7 --
REVERSE BIAS	TTL	COMBINED	106,900,832	111	0.95	1.0	1.1
		1-10 11-25 26-50 51-75	81,698,664 19,931,400 4,717,768 553,000	70 35 5 1	0.77 1.5 0.65 0.40	0.86 1.8 1.1 1.8	0.95 2.1 1.7 5.4
	COMBINED	COMBINED	72,499,192	862	12.	12.	12.
		COMBINED	11,395,892	508	43.	45.	46.
	CMOS	1-10 11-25 26-50 51-75 76-100	9,187,856 418,036 1,170,000 335,000 285,000	502 4 1 1 0	53. 5.5 0.19 0.67 --	55. 9.6 0.85 3.0 --	57. 16. 2.6 8.9 --
		COMBINED	2,410,650	1	0.093	0.41	1.2
		1-10 11-25	2,245,250 165,400	1 0	0.099 --	0.45 --	1.3 --
		COMBINED	10,016,078	45	3.9	4.5	5.2
	DTL	1-10 11-25 26-50	7,957,074 459,000 1,600,004	40 1 4	4.4 0.49 1.4	5.0 2.2 2.5	5.8 6.5 4.2
		COMBINED	6,302,040	14	1.7	2.2	2.9
	ECL	1-10 11-25 26-50	7,957,074 459,000 1,600,004	40 1 4	4.4 0.49 1.4	5.0 2.2 2.5	5.8 6.5 4.2
		COMBINED	6,302,040	14	1.7	2.2	2.9

TABLE 42: SUMMARIZED GENERIC FAILURE RATES (BY TEST TYPE)
LIFE TEST DATA (Cont'd)

TEST TYPE	OPERATIONAL TYPE	GATE COMPLEXITY	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
REVERSE BIAS (Cont'd)	ECL (Cont'd)	1-10	5,936,040	12	1.5	2.0	2.7
		11-25	366,000	2	2.3	5.5	12.
	HTTL	COMBINED	612,000	1	0.36	1.6	4.9
		1-10	510,000	0	--	--	3.2
		11-25	102,000	1	--	--	--
	LTTL	COMBINED	4,702,500	15	2.5	3.2	4.1
		1-10	3,419,500	15	3.4	4.4	5.6
		11-25	576,000	0	--	--	2.8
		26-50	575,000	0	--	--	2.8
		51-75	132,000	0	--	--	--
RTL	COMBINED		71,000	9	--	--	--
		1-10	71,000	9	--	--	--
STTL	COMBINED		1,553,520	31	17.	20.	24.
		1-10	1,096,520	19	14.	17.	22.
LSTTL	COMBINED		457,000	12	20.	26.	35.
		1-10	2,371,560	9	2.7	3.8	5.3
TTL	COMBINED		2,261,040	6	1.7	2.7	4.0
		11-25	110,520	3	--	--	--
	COMBINED		33,063,952	229	6.5	6.9	7.3
		1-10	18,840,740	211	11.	11.	12.
	COMBINED		8,574,712	11	0.95	1.3	1.7
		11-25	3,481,500	5	0.89	1.4	2.3
	COMBINED		2,167,000	2	0.38	0.92	2.0
		51-75					

TABLE 42: SUMMARIZED GENERIC FAILURE RATES (BY TEST TYPE)
LIFE TEST DATA (Cont'd)

TEST TYPE	OPERATIONAL TYPE	GATE COMPLEXITY	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
STATIC FORWARD BIAS	COMBINED	COMBINED	56,404,456	155	2.6	2.7	2.9
	CMOS	COMBINED	1,013,788	1	0.22	0.99	3.0
		1-10	1,013,788	1	0.22	0.99	3.0
	PMOS	COMBINED	158,000	0	--	--	--
		26-50	158,000	0	--	--	--
	DTL	COMBINED	231,000	0	--	--	--
		1-10	231,000	0	--	--	--
	ECL	COMBINED	10,319,970	132	12.	13.	14.
		1-10	6,769,970	103	14.	15.	17.
		11-25	3,460,000	29	7.1	8.4	10.
		51-75	90,000	0	--	--	--
	HTTL	COMBINED	1,171,000	0	--	--	1.4
		1-10	800,000	0	--	--	2.0
		11-25	371,000	0	--	--	--
	L TTL	COMBINED	129,668	2	6.4	15.	33.
		1-10	53,668	2	--	--	--
		26-50	76,000	0	--	--	--
	STTL	COMBINED	35,380,000	0	--	--	0.045
		1-10	35,380,000	0	--	--	0.045
	LSTTL	COMBINED	61,000	0	--	--	--
		1-10	61,000	0	--	--	--

TABLE 42: SUMMARIZED GENERIC FAILURE RATES (BY TEST TYPE)
LIFE TEST DATA (Cont'd)

TEST TYPE	OPERATIONAL TYPE	GATE COMPLEXITY	PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
STATIC FORWARD BIAS (Cont'd)	TTL	COMBINED	7,940,030	20	2.0	2.5	3.1
		1-10	5,985,000	14	1.8	2.3	3.0
		11-25	935,862	1	0.24	1.1	3.2
		26-50	614,500	3	2.5	4.9	9.0
STORAGE		51-75	404,668	2	2.0	4.9	11.
	COMBINED	COMBINED	73,442,625	100	1.2	1.4	1.5
	CMOS	COMBINED	639,452	7	7.4	11.	16.
		1-10	474,452	7	10.	15.	22.
		11-25	110,000	0	--	--	--
		26-50	55,000	0	--	--	--
	DTL	COMBINED	18,094,000	12	0.50	0.66	0.88
		1-10	17,973,000	12	0.50	0.67	0.88
		11-25	36,000	0	--	--	--
		26-50	85,000	0	--	--	--
ECL	COMBINED	COMBINED	3,884,360	7	1.2	1.8	2.6
		1-10	3,139,610	5	0.98	1.6	2.5
		11-25	603,750	1	0.37	1.7	5.0
		26-50	92,000	0	--	--	--
		51-75	49,000	1	--	--	--
	HTTL	COMBINED	3,029,000	8	1.8	2.6	3.8
		1-10	2,519,000	5	1.2	2.0	3.1
		11-25	510,000	3	3.0	5.9	11.
	L TTL	COMBINED	3,970,354	1	0.056	0.25	0.75
		1-10	3,228,228	1	0.069	0.31	0.93
		11-25	413,126	0	--	--	--
		26-50	186,000	0	--	--	--
		51-75	143,000	0	--	--	--

TABLE 42: SUMMARIZED GENERIC FAILURE RATES (BY TEST TYPE)
LIFE TEST DATA (Cont'd)

TEST TYPE	OPERATIONAL TYPE	GATE COMPLEXITY	PART HOURS	NUMBER FAILED	LOWER 20% $(F/10^6)$	λ $(F/10^6)$	UPPER 80% $(F/10^6)$
STORAGE (Cont'd)	STTL	COMBINED	1,215,000	12	7.4	9.9	13.
		1-10	931,500	6	4.2	6.4	9.7
		11-25	283,500	6	14.	21.	32.
	LSTTL	COMBINED	3,571,000	4	0.64	1.1	1.9
		1-10	3,313,000	3	0.46	0.91	1.7
		11-25	212,000	1	--	--	--
		51-75	46,000	0	--	--	--
	TTL	COMBINED	39,039,459	49	1.1	1.3	1.4
		1-10	26,450,155	33	1.1	1.2	1.5
		11-25	8,340,000	15	1.4	1.8	2.3
		26-50	2,482,304	0	--	--	0.65
		51-75	1,767,000	1	0.13	0.57	1.7

TABLE 43: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)

LIFE TEST DATA

SCREEN CLASS	PACKAGE TYPE	TEST CONDITIONS (°C)	TEST TYPE	NUMBER OF PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
A-1	COMBINED	COMBINED	COMBINED	191,000	0	--	--	--
	HDIP	COMBINED	COMBINED	133,000	0	--	--	--
		101-125	DYNAMIC	133,000	0	--	--	--
	HFPK	COMBINED	COMBINED	58,000	0	--	--	--
		101-125	REV BIAS	58,000	0	--	--	--
A-2	COMBINED	COMBINED	COMBINED	1,121,000	0	--	--	1.4
	HFPK	COMBINED	COMBINED	1,121,000	0	--	--	1.4
		101-125	DYNAMIC	40,000	0	--	--	--
		126-150	DYNAMIC	151,000	0	--	--	--
		126-150	STORAGE	930,000	0	--	--	1.7
B-1	COMBINED	COMBINED	COMBINED	26,600,771	201	7.1	7.6	8.0
	HDIP	COMBINED	COMBINED	14,007,151	95	6.2	6.8	7.4
		101-125	REV BIAS	129,000	1	--	--	--
		126-150	DYNAMIC	6,515,424	31	4.0	4.8	5.6
		126-150	STATIC FORWARD BIAS	2,109,500	4	1.1	1.9	3.2
		126-150	STORAGE	4,561,855	8	1.2	1.8	2.5
		151-175	DYNAMIC	360,000	3	4.3	8.3	15.
		151-175	STATIC FORWARD BIAS	222,668	2	3.7	9.0	19.
		201-225	REVERSE BIAS	108,704	46	--	--	--

TABLE 43: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
LIFE TEST DATA (Cont'd)

SCREEN CLASS	PACKAGE TYPE	TEST CONDITIONS (°C)	TEST TYPE	NUMBER OF PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
B-1 (Cont'd)	HFK	COMBINED	COMBINED	12,593,620	106	7.7	8.4	9.2
		126-150	DYNAMIC	7,404,992	80	9.8	11.	12.
		126-150	STATIC FORWARD BIAS	618,862	1	0.36	1.6	4.8
		126-150	STORAGE	3,368,758	2	0.24	0.59	1.3
		151-175	DYNAMIC	794,000	0	--	--	2.0
		201-225	REVERSE BIAS	276,008	2	3.0	7.2	16.
		276-300	REVERSE BIAS	131,000	21	130.	160.	197.
		COMBINED	COMBINED	3,763,000	3	0.41	0.80	1.5
		COMBINED	COMBINED	1,715,000	2	0.48	1.2	2.5
		126-150	DYNAMIC STORAGE	951,000	2	0.87	2.1	4.5
B-2	HDIP	COMBINED	COMBINED	1,793,000	1	0.12	0.56	1.7
		101-125	DYNAMIC	85,000	0	--	--	--
		126-150	DYNAMIC STORAGE	522,000	0	--	--	3.1
		126-150	STORAGE	1,054,000	1	0.21	0.95	2.8
		151-175	DYNAMIC	132,000	0	--	--	--
		COMBINED	COMBINED	255,000	0	--	--	--
		126-150	DYNAMIC STORAGE	154,000	0	--	--	--
		126-150	STORAGE	101,000	0	--	--	--
		COMBINED	COMBINED	24,385,480	565	22.	23.	24.
		COMBINED	COMBINED	15,254,388	542	34.	36.	37.
C-1	HDIP	101-125	DYNAMIC	603,952	91	137.	151.	166.
		101-125	REVERSE BIAS	521,000	0	--	--	3.1
		COMBINED	COMBINED					

TABLE 43: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
LIFE TEST DATA (Cont'd)

SCREEN CLASS	PACKAGE TYPE	TEST CONDITIONS (°C)	TEST TYPE	NUMBER OF PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
C-1 (Cont'd)	HDIP (Cont'd)	126-150	DYNAMIC	8,026,000	7	0.59	0.87	1.3
		126-150	STATIC FORWARD BIAS	181,000	1	--	--	--
		126-150	STORAGE	4,970,000	4	0.46	0.80	1.4
		151-175	STATIC FORWARD BIAS	443,000	0	--	--	--
		176-200	REVERSE BIAS	116,962	141	--	--	--
		201-225	REVERSE BIAS	230,197	160	649.	695.	745.
		201-225	STORAGE	122,452	7	--	--	--
		226-250	REVERSE BIAS	39,825	131	--	--	--
		COMBINED	COMBINED	9,131,092	23	2.1	2.5	3.1
	HFPK	101-125	DYNAMIC	1,409,000	2	0.59	1.4	3.0
		126-150	DYNAMIC	3,218,000	3	0.48	0.93	1.7
		126-150	STORAGE	2,348,000	1	0.095	0.43	1.3
		176-200	REVERSE BIAS	686,504	3	2.2	4.4	8.0
C-2	COMBINED	201-225	REVERSE BIAS	830,004	2	0.99	2.4	5.2
		226-250	REVERSE BIAS	379,584	12	24.	32.	42.
		251-275	REVERSE BIAS	170,000	0	--	--	--
		276-300	STORAGE	90,000	0	--	--	--
	HDIP	COMBINED	COMBINED	2,151,000	11	3.8	5.1	6.9
		COMBINED	COMBINED	1,759,000	9	3.7	5.1	7.1
	HFPK	126-150	DYNAMIC	1,277,000	9	5.0	7.0	9.8
		126-150	STORAGE	482,000	0	--	--	--
		COMBINED	COMBINED	392,000	2	2.1	5.1	11.
		126-150	DYNAMIC	149,000	2	5.5	13.	29.
	COMBINED	126-150	STORAGE	166,000	0	--	--	--
		176-200	DYNAMIC	77,000	0	--	--	--

TABLE 43: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
LIFE TEST DATA (Cont'd)

SCREEN CLASS	PACKAGE TYPE	TEST CONDITIONS (°C)	TEST TYPE	NUMBER OF PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
N	COMBINED	COMBINED	COMBINED	421,177,794	731	1.7	1.7	1.8
	HDIP	COMBINED	COMBINED	104,799,332	334	3.0	3.2	3.3
	26-50	REVERSE BIAS	REVERSE BIAS	4,950,000	17	2.7	3.4	4.3
	51-75	REVERSE BIAS	REVERSE BIAS	1,291,856	2	0.64	1.5	3.3
	76-100	DYNAMIC	DYNAMIC	2,594,000	4	0.89	1.5	2.6
	76-100	REVERSE BIAS	REVERSE BIAS	838,000	3	1.8	3.6	6.6
	76-100	STATIC FORWARD BIAS	STATIC FORWARD BIAS	3,679,000	4	0.62	1.1	1.8
	101-125	DYNAMIC	DYNAMIC	4,799,600	47	8.6	9.8	11.
	101-125	REVERSE BIAS	REVERSE BIAS	24,793,494	41	1.4	1.7	1.9
	101-125	STATIC FORWARD BIAS	STATIC FORWARD BIAS	6,464,500	6	0.60	0.93	1.4
	101-125	STORAGE	STORAGE	419,328	0	--	--	--
	126-150	DYNAMIC	DYNAMIC	29,415,500	16	0.43	0.54	0.69
	126-150	REVERSE BIAS	REVERSE BIAS	508,000	3	3.0	5.9	11.
	126-150	STATIC FORWARD BIAS	STATIC FORWARD BIAS	555,000	0	--	--	2.9
	126-150	STORAGE	STORAGE	16,926,000	17	0.80	1.0	1.3
	151-175	DYNAMIC	DYNAMIC	2,557,000	0	--	--	0.63
	151-175	STATIC FORWARD BIAS	STATIC FORWARD BIAS	920,000	1	0.24	1.1	3.3
	151-175	STORAGE	STORAGE	116,526	0	--	--	--
	176-200	REVERSE BIAS	REVERSE BIAS	723,000	5	4.3	6.9	11.
	176-200	STATIC FORWARD BIAS	STATIC FORWARD BIAS	350,288	26	62.	74.	89.
	176-200	STORAGE	STORAGE	177,000	0	--	--	--
	201-225	DYNAMIC	DYNAMIC	77,040	0	--	--	--
	201-225	REVERSE BIAS	REVERSE BIAS	154,080	4	15.	26.	44.
	201-225	STATIC FORWARD BIAS	STATIC FORWARD BIAS	103,720	14	--	--	--
	226-250	DYNAMIC	DYNAMIC	72,000	1	--	--	--
	226-250	REVERSE BIAS	REVERSE BIAS	252,000	13	39.	52.	68.
	226-250	STATIC FORWARD BIAS	STATIC FORWARD BIAS	265,000	60	202.	226.	255.
	226-250	STORAGE	STORAGE	820,750	7	5.8	8.5	12.
	251-275	DYNAMIC	DYNAMIC	72,000	0	--	--	--
	251-275	REVERSE BIAS	REVERSE BIAS	180,000	13	55.	72.	95.

TABLE 43: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
LIFE TEST DATA (Cont'd)

SCREEN CLASS	PACKAGE TYPE	TEST CONDITIONS (°C)	TEST TYPE	NUMBER OF PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
N (Cont'd)	HDIP (Cont'd)	251-275	STATIC FORWARD BIAS	61,250	24	--	--	--
		276-300	STORAGE	663,400	6	5.9	9.0	14.
		COMBINED		281,839,636	339	1.1	1.2	1.3
	PDIP	26-50	DYNAMIC	137,223,000	0	--	--	0.012
		26-50	REVERSE BIAS	8,525,000	152	17.	18.	19.
		51-75	REVERSE BIAS	656,000	8	8.5	12.	17.
		76-100	DYNAMIC	80,000	0	--	--	--
		76-100	REVERSE BIAS	1,153,000	4	2.0	3.5	5.8
		76-100	STATIC FORWARD BIAS	174,000	0	--	--	--
		101-125	DYNAMIC	10,455,764	47	3.9	4.5	5.1
		101-125	REVERSE BIAS	7,616,404	32	3.6	4.2	5.0
		101-125	STATIC FORWARD BIAS	1,573,000	1	0.14	0.64	1.9
		126-150	DYNAMIC	53,748,500	43	0.70	0.80	0.92
		126-150	STATIC FORWARD BIAS	1,723,668	9	3.7	5.2	7.3
		126-150	STORAGE	23,576,300	43	1.6	1.8	2.1
		151-175	DYNAMIC	30,000	0	--	--	--
		151-175	STATIC FORWARD BIAS	35,305,000	0	--	--	0.046
HFPK	HFPK	COMBINED		32,507,826	58	1.6	1.8	2.0
		26-50	DYNAMIC	740,000	0	--	--	2.2
		26-50	REVERSE BIAS	1,150,000	36	27.	31.	37.
		51-75	REVERSE BIAS	15,000	0	--	--	--
		76-100	DYNAMIC	46,000	1	--	--	--
		101-125	DYNAMIC	961,000	1	0.23	1.0	3.1
		101-125	REVERSE BIAS	14,578,570	10	0.50	0.69	0.94
		101-125	STATIC FORWARD BIAS	1,106,000	1	0.20	0.90	2.7
		101-125	STORAGE	208,000	0	--	--	--
		126-150	DYNAMIC	2,929,000	5	1.1	1.7	2.7
		126-150	REVERSE BIAS	315,000	0	--	--	--
		126-150	STATIC FORWARD BIAS	485,000	1	0.46	2.1	6.2

TABLE 43: SUMMARIZED GENERIC FAILURE RATES (BY SCREEN CLASS)
LIFE TEST DATA (Cont'd)

SCREEN CLASS	PACKAGE TYPE	TEST CONDITIONS (°C)	TEST TYPE	NUMBER OF PART HOURS	NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
N (Cont'd)	HFPK (Cont'd)	126-150	STORAGE	9,233,000	2	0.089	0.22	0.46
		151-175	DYNAMIC	566,000	1	0.39	1.8	5.3
		151-175	STORAGE	15,000	0	--	--	--
		201-225	DYNAMIC	64,000	0	--	--	--
		201-225	STATIC FORWARD BIAS	64,000	0	--	--	--
	CAN	276-300	STORAGE	32,256	0	--	--	--
		COMBINED	COMBINED	2,031,000	0	--	--	0.79
		76-100	DYNAMIC	196,000	0	--	--	--
		101-125	DYNAMIC	46,000	0	--	--	--
		101-125	REVERSE BIAS	1,123,000	0	--	--	1.4
X	COMBINED	126-150	STORAGE	666,000	0	--	--	2.4
		COMBINED	COMBINED	9,686,000	7	0.49	0.72	1.1
	HDIP	COMBINED	COMBINED	9,207,000	7	0.51	0.76	1.1
		101-125	DYNAMIC	7,660,000	5	0.40	0.65	1.0
	HFPK	126-150	STORAGE	1,547,000	2	0.53	1.3	2.8
		COMBINED	COMBINED	228,000	0	--	--	--
	CAN	101-125	DYNAMIC	221,000	0	--	--	--
		126-150	STORAGE	7,000	0	--	--	--
		COMBINED	COMBINED	251,000	0	--	--	--
		101-125	DYNAMIC	174,000	0	--	--	--
X	CAN	126-150	STORAGE	77,000	0	--	--	--
		COMBINED	COMBINED	174,000	0	--	--	--

TABLE 44: GENERIC FAILURE RATES
DYNAMIC LIFE TESTS

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
CMOS	A-1	HDIP	51-75	101-125	133,000/0	--	--	--
	C-1	HDIP	1-10	101-125	603,952/91	137.	151.	166.
	N	HDIP	1-10	101-125	1,480,130/1	0.15	0.68	2.0
	N	HDIP	1-10	126-150	678,000/0	--	--	2.4
	N	HDIP	26-50	101-125	710,470/15	16.	21.	27.
	N	PDIP	1-10	101-125	3,747,232/19	4.1	5.1	6.3
	N	PDIP	26-50	101-125	249,216/2	3.3	8.0	17.
	X	HDIP	1-10	101-125	96,000/0	--	--	--
	N	HDIP	1-10	126-150	280,500/2	2.9	7.1	15.
	N	HDIP	11-25	126-150	468,000/0	--	--	--
PMOS	N	CAN	11-25	76-100	196,000/0	--	--	--
DTL	A-2	HFPK	1-10	126-150	38,000/0	--	--	--
	B-1	HFPK	1-10	126-150	2,288,700/25	9.1	11.	13.
	B-1	HFPK	11-25	126-150	408,500/44	94.	108.	124.
	B-1	HFPK	26-50	126-150	38,000/0	--	--	--
	B-2	HDIP	1-10	126-150	158,000/0	--	--	--
	B-2	HDIP	11-25	126-150	105,000/1	--	--	--
	B-2	HDIP	26-50	126-150	55,000/0	--	--	--
	B-2	HFPK	1-10	101-125	40,000/0	--	--	--
	B-2	HFPK	1-10	126-150	23,000/0	--	--	--
	B-2	CAN	1-10	126-150	143,000/0	--	--	--
	B-2	CAN	11-25	126-150	11,000/0	--	--	--
	C-1	HDIP	1-10	126-150	4,648,000/4	0.49	0.86	1.5
	C-1	HDIP	11-25	126-150	794,000/1	0.28	1.3	3.8
	C-1	HDIP	26-50	126-150	315,000/0	--	--	--
	C-1	HFPK	1-10	126-150	2,204,000/2	0.37	0.91	1.9
	C-1	HFPK	11-25	126-150	316,000/0	--	--	--
	C-2	HDIP	1-10	126-150	591,000/4	3.9	6.8	11.
	C-2	HDIP	26-50	126-150	105,000/0	--	--	--
	C-2	HFPK	1-10	126-150	63,000/0	--	--	--
	N	HDIP	1-10	126-150	13,395,000/6	0.29	0.45	0.68
	N	HDIP	11-25	126-150	100,000/0	--	--	--
	N	HDIP	26-50	126-150	234,000/1	--	--	--
	N	PDIP	1-10	26-50	50,504,000/0	--	--	0.031
	N	PDIP	1-10	126-150	12,082,000/7	0.39	0.58	0.85
	N	PDIP	11-25	126-150	105,000/0	--	--	--

TABLE 44: GENERIC FAILURE RATES
DYNAMIC LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
DTL (Cont'd)	N	HFPK	1-10	101-125	651,000/0	--	--	2.5
	N	HFPK	1-10	126-150	909,000/4	2.5	4.4	7.4
	N	HFPK	11-25	126-150	77,000/0	--	--	--
	N	CAN	1-10	101-125	46,000/0	--	--	--
ECL	N	HOIP	1-10	101-125	141,000/1	--	--	--
	N	HOIP	1-10	126-150	198,000/2	4.2	10.	22.
	N	HOIP	11-25	101-125	452,000/14	24.	31.	40.
	N	HOIP	26-50	101-125	46,000/0	--	--	--
	N	POIP	1-10	26-50	68,006,000/0	--	--	0.024
	B-1	HOIP	1-10	126-150	528,000/1	0.42	1.9	5.7
	B-2	HFPK	1-10	126-150	397,000/0	--	--	--
HTTL	B-2	HFPK	1-10	126-150	55,000/0	--	--	--
	C-1	HOIP	1-10	126-150	182,000/0	--	--	--
	C-2	HOIP	1 10	126-150	239,000/0	--	--	--
	N	HOIP	1-10	101-125	45,000/0	--	--	--
	N	HOIP	1-10	126-150	820,000/2	1.0	2.4	5.2
	N	HOIP	11-25	126-150	105,000/0	--	--	--
	X	HOIP	1-10	101-125	1,177,000/0	--	--	1.4
	X	HOIP	11-25	101-125	505,000/0	--	--	3.2
	B-1	HOIP	1-10	126-150	305,000/6	13.	20.	30.
	B-1	HOIP	11-25	126-150	129,000/10	57.	78.	106.
	B-1	HFPK	1-10	126-150	189,000/0	--	--	--
	B-1	HFPK	11-25	126-150	77,000/1	--	--	--
	N	HOIP	1-10	101-125	402,000/4	5.7	10.	17.
	N	HOIP	11-25	101-125	231,500/3	6.6	13.	24.
STTL	N	HOIP	26-50	101-125	58,000/5	--	--	--
	N	HFPK	11-25	126-150	220,000/0	--	--	--
	N	HFPK	26-50	76-100	46,000/1	--	--	--
	N	HOIP	1-10	101-125	115,000/0	--	--	--
	N	HOIP	1-10	126-150	25,000/0	--	--	--
	N	POIP	1-10	76-100	80,000/0	--	--	--
	N	POIP	1-10	101-125	715,000/1	0.31	1.4	4.2
	N	POIP	1-10	126-150	345,000/1	0.65	2.9	8.7
	N	POIP	11-25	101-125	284,000/1	0.79	3.5	11.
	N	POIP	11-25	126-150	100,000/0	--	--	--
	X	HOIP	1-10	101-125	1,122,000/2	0.73	1.8	3.8

TABLE 44: GENERIC FAILURE RATES
DYNAMIC LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
LSTTL	N	HDIP	1-10	101-125	102,000/1	--	--	--
	N	HDIP	1-10	201-225	77,040/0	--	--	--
	N	HDIP	1-10	226-250	72,000/1	--	--	--
	N	HDIP	1-10	251-275	72,000/0	--	--	--
	N	PDIP	1-10	101-125	1,644,700/3	0.93	1.8	3.4
	N	PDIP	1-10	126-150	385,000/1	0.58	2.6	7.8
	N	PDIP	51-75	101-125	82,000/0	--	--	--
	X	HDIP	1-10	101-125	965,000/0	--	--	1.7
	A-2	HFPK	1-10	101-125	40,000/0	--	--	--
	A-2	HFPK	1-10	126-150	84,000/0	--	--	--
TTL	A-2	HFPK	11-25	126-150	29,000/0	--	--	--
	B-1	HDIP	1-10	126-150	3,462,260/10	2.1	2.9	3.9
	B-1	HDIP	1-10	151-175	10,000/0	--	--	--
	B-1	HDIP	11-25	126-150	1,868,396/4	1.2	2.1	3.6
	B-1	HDIP	26-50	126-150	222,768/0	--	--	--
	B-1	HDIP	26-50	151-175	350,000/3	4.4	8.6	16.
	B-1	HFPK	1-10	126-150	3,474,792/9	1.9	2.6	3.6
	B-1	HFPK	1-10	151-175	397,000/0	--	--	--
	B-1	HFPK	11-25	126-150	532,000/1	0.42	1.9	5.6
	B-1	HFPK	11-25	151-175	397,000/0	--	--	--
	B-2	HDIP	1-10	126-150	504,000/1	0.44	2.0	5.9
	B-2	HDIP	11-25	126-150	129,000/0	--	--	--
	B-2	HFPK	1-10	126-150	378,000/0	--	--	--
	B-2	HFPK	11-25	101-125	45,000/0	--	--	--
	B-2	HFPK	11-25	126-150	55,000/0	--	--	--
	B-2	HFPK	11-25	151-175	132,000/0	--	--	--
	B-2	HFPK	51-75	126-150	11,000/0	--	--	--
	C-1	HDIP	1-10	126-150	1,300,000/0	--	--	1.2
	C-1	HDIP	11-25	126-150	682,000/2	1.2	2.9	6.3
	C-1	HDIP	26-50	126-150	105,000/0	--	--	--
	C-1	HFPK	1-10	101-125	1,409,000/2	0.59	1.4	3.0
	C-1	HFPK	1-10	126-150	698,000/1	0.32	1.4	4.3
	C-2	HDIP	1-10	126-150	290,000/3	5.3	10.	19.
	C-2	HDIP	11-25	126-150	52,000/2	--	--	--
	C-2	HFPK	1-10	126-150	86,000/2	--	--	--
	C-2	HFPK	51-75	176-200	77,000/0	--	--	--

TABLE 44: GENERIC FAILURE RATES
DYNAMIC LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
TTL (Cont'd)	N	HDIP	1-10	76-100	2,594,000/4	0.89	1.5	2.6
	N	HDIP	1-10	101-125	634,500/2	1.3	3.2	6.7
	N	HDIP	1-10	126-150	12,671,000/3	0.12	0.24	0.44
	N	HDIP	11-25	101-125	136,000/0	--	--	--
	N	HDIP	11-25	126-150	336,000/0	--	--	--
	N	HDIP	26-50	101-125	246,000/1	--	--	--
	N	HDIP	26-50	126-150	105,000/0	--	--	--
	N	HDIP	26-50	151-175	2,505,000/0	--	--	0.65
	N	HDIP	51-75	151-175	52,000/0	--	--	--
	N	PDIP	1-10	26-50	18,713,000/0	--	--	0.086
	N	PDIP	1-10	101-125	2,662,612/15	4.4	5.6	7.2
	N	PDIP	1-10	126-150	27,763,500/17	0.49	0.61	0.77
	N	PDIP	1-10	151-175	30,000/0	--	--	--
	N	PDIP	11-25	101-125	666,004/5	4.6	7.5	12.
	N	PDIP	11-25	126-150	12,923,000/17	1.0	1.3	1.7
	N	PDIP	26-50	101-125	214,000/0	--	--	--
	N	PDIP	26-50	126-150	45,000/0	--	--	--
	N	PDIP	51-75	101-125	191,000/1	--	--	--
	N	HFPK	1-10	26-50	740,000/0	--	--	2.2
	N	HFPK	1-10	126-150	1,683,000/1	0.13	0.59	1.8
	N	HFPK	1-10	151-175	526,000/0	--	--	3.1
	N	HFPK	1-10	201-225	64,000/0	--	--	--
	N	HFPK	11-25	101-125	310,000/1	0.72	3.2	9.7
	N	HFPK	11-25	126-150	40,000/0	--	--	--
	N	HFPK	11-25	151-175	40,000/1	--	--	--
	X	HGIP	1-10	101-125	1,263,000/0	--	--	1.3
	X	HDIP	11-25	101-125	1,559,000/2	0.53	1.3	2.7
	X	HDIP	26-50	101-125	751,000/1	0.30	1.3	4.0
	X	HDIP	51-75	101-125	222,000/0	--	--	--
	X	HFPK	1-10	101-125	221,000/0	--	--	--
	X	CAN	26-50	101-125	174,000/0	--	--	--

TABLE 45: GENERIC FAILURE RATES
REVERSE BIAS LIFE TESTS

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
CMOS	B-1	HDIP	1-10	201-225	108,704/46	--	--	--
	C-1	HDIP	1-10	176-200	116,962/141	--	--	--
	C-1	HDIP	1-10	201-225	230,197/160	649.	695.	745.
	C-1	HDIP	1-10	226-250	39,825/131	--	--	--
	N	HDIP	1-10	76-100	598,000/3	2.6	5.0	9.2
	N	HDIP	1-10	101-125	2,505,000/5	1.2	2.0	3.2
	N	HDIP	11-25	101-125	355,700/1	0.63	2.8	8.4
	N	HDIP	26-50	76-100	240,000/0	--	--	--
	N	HDIP	26-50	101-125	442,000/0	--	--	--
	N	HDIP	51-75	101-125	77,000/1	--	--	--
	N	HDIP	76-100	101-125	285,000/0	--	--	--
	N	PDIP	1-10	76-100	816,000/3	1.9	3.7	6.8
	N	PDIP	1-10	101-125	4,773,168/13	2.1	2.7	3.6
	N	PDIP	11-25	101-125	62,336/3	--	--	--
	N	PDIP	26-50	76-100	337,000/1	0.66	3.0	8.9
	N	PDIP	26-50	101-125	151,000/0	--	--	--
	N	PDIP	51-75	101-125	258,000/0	--	--	--
	N	HDIP	1-10	101-125	52,000/0	--	--	--
	N	PDIP	1-10	101-125	60,000/1	--	--	--
	N	PDIP	11-25	101-125	165,400/0	--	--	--
PMOS	N	HFPK	1-10	101-125	1,159,250/0	--	--	1.4
	N	CAN	1-10	101-125	974,000/3	--	--	1.7
	N	HDIP	1-10	26-50	2,010,000/2	0.41	1.0	2.1
	N	HDIP	1-10	101-125	2,804,324/5	1.1	1.8	2.8
	N	HDIP	11-25	101-125	262,000/0	--	--	--
	N	HDIP	26-50	101-125	1,575,004/4	1.5	2.5	4.3
	N	PDIP	1-10	26-50	754,000/20	21.	27.	33.
	N	PDIP	1-10	51-75	100,000/2	--	--	--
	N	PDIP	1-10	101-125	68,750/11	--	--	--
	N	PDIP	26-50	51-75	25,000/0	--	--	--
DTL	N	HFPK	1-10	101-125	2,071,000/0	--	--	0.78
	N	HFPK	11-25	101-125	197,000/1	--	--	--
	N	CAN	1-10	101-125	149,000/0	--	--	--

TABLE 45: GENERIC FAILURE RATES
REVERSE BIAS LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
ECL	N	HDIP	1-10	51-75	1,241,856/2	0.66	1.6	3.4
	N	HDIP	1-10	101-125	1,644,984/7	2.9	4.3	6.2
	N	HDIP	1-10	176-200	450,000/2	1.8	4.4	9.5
	N	HDIP	11-25	101-125	366,000/2	2.3	5.5	12.
	N	HFPK	1-10	101-125	2,599,200/1	0.086	0.38	1.2
HTTL	N	HDIP	1-10	101-125	279,000/0	--	--	--
	N	PDIP	1-10	101-125	231,000/0	--	--	--
	N	PDIP	11-25	51-75	25,000/1	--	--	--
	N	PDIP	11-25	101-125	77,000/0	--	--	--
L TTL	N	HDIP	1-10	26-50	2,940,000/15	4.0	5.1	6.5
	N	HDIP	1-10	101-125	100,000/0	--	--	--
	N	HDIP	1-10	176-200	168,000/0	--	--	--
	N	HDIP	11-25	101-125	419,000/0	--	--	--
	N	HDIP	26-50	101-125	384,000/0	--	--	--
	N	HDIP	51-75	101-125	100,000/0	--	--	--
	N	PDIP	1-10	101-125	19,500/0	--	--	--
	N	HFPK	1-10	101-125	192,000/0	--	--	--
	N	HFPK	11-25	101-125	157,000/0	--	--	--
	N	HFPK	26-50	101-125	191,000/0	--	--	--
	N	HFPK	51-75	101-125	32,000/0	--	--	--
	N	PDIP	1-10	26-50	71,000/9	--	--	--
	N	HDIP	1-10	101-125	950,000/2	0.87	2.1	4.5
STTL	N	HDIP	1-10	201-225	38,520/3	--	--	--
	N	HDIP	1-10	226-250	72,000/6	--	--	--
	N	HDIP	1-10	251-275	36,000/8	--	--	--
	N	HDIP	11-25	101-125	244,000/0	--	--	--
	N	HDIP	11-25	176-200	105,000/3	--	--	--

TABLE 45: GENERIC FAILURE RATES
REVERSE BIAS LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
STTL (Cont'd)	N	HDIP	11-25	226-250	72,000/6	--	--	--
	N	HDIP	11-25	251-275	36,000/3	--	--	--
LSTTL	N	HDIP	1-10	101-125	1,532,000/2	0.54	1.3	2.8
	N	HDIP	1-10	126-150	508,000/3	3.0	5.9	11.
	N	HDIP	1-10	201-225	77,040/0	--	--	--
	N	HDIP	1-10	226-250	72,000/1	--	--	--
	N	HDIP	1-10	251-275	72,000/0	--	--	--
	N	HDIP	11-25	201-225	38,520/1	--	--	--
	N	HDIP	11-25	226-250	36,000/0	--	--	--
	N	HDIP	11-25	251-275	36,000/2	--	--	--
	N	HDIP	11-25	251-275	36,000/2	--	--	--
	N	HDIP	11-25	251-275	36,000/2	--	--	--
TTL	A-1	HFPK	11-25	101-125	58,000/0	--	--	--
	B-1	HDIP	51-75	101-125	129,000/1	--	--	--
	B-1	HFPK	1-10	201-225	276,008/2	3.0	7.2	16.
	B-1	HFPK	1-10	276-300	131,000/21	130.	160.	197.
	C-1	HDIP	1-10	101-125	521,000/0	--	--	--
	C-1	HFPK	1-10	176-200	686,504/3	2.2	4.4	8.0
	C-1	HFPK	1-10	201-225	830,004/2	0.99	2.4	5.2
	C-1	HFPK	1-10	226-250	379,584/12	24.	32.	42.
	C-1	HFPK	1-10	251-275	170,000/0	--	--	--
	N	HDIP	1-10	101-125	3,490,890/5	0.89	1.4	2.3
	N	HDIP	11-25	101-125	3,476,592/7	1.0	2.0	2.9
	N	HDIP	26-50	101-125	2,264,000/0	--	--	0.71
	N	HDIP	51-75	51-75	50,000/0	--	--	--
	N	HDIP	51-75	101-125	1,185,000/0	--	--	--
	N	PDIP	1-10	26-50	7,700,000/123	15.	16.	1.4
	N	PDIP	1-10	51-75	301,000/1	0.74	3.3	17.
	N	PDIP	1-10	101-125	816,750/2	1.0	2.5	10.
	N	PDIP	11-25	51-75	100,000/2	--	--	5.2
	N	PDIP	11-25	101-125	731,000/1	0.31	1.4	--
	N	PDIP	26-50	51-75	90,000/2	--	--	4.1
	N	PDIP	26-50	101-125	160,500/1	--	--	--
	N	PDIP	51-75	51-75	15,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--
	N	PDIP	51-75	101-125	42,000/0	--	--	--

TABLE 45: GENERIC FAILURE RATES
REVERSE BIAS LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
TTL (Cont'd)	N	HFPK	1-10	26-50	1,150,000/36	27.	31.	37.
	N	HFPK	1-10	51-75	15,000/0	--	--	--
	N	HFPK	1-10	101-125	2,373,000/4	0.97	1.7	2.8
	N	HFPK	11-25	101-125	3,894,120/1	0.057	0.26	0.77
	N	HFPK	11-25	126-150	315,000/0	--	--	--
	N	HFPK	26-50	101-125	967,000/2	0.85	2.1	4.4
	N	HFPK	51-75	101-125	746,000/1	0.30	1.3	4.0
	N	HFPK	51-75	101-125	746,000/1	0.30	1.3	4.0

TABLE 46: GENERIC FAILURE RATES
STATIC FORWARD BIAS LIFE TESTS

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
CMOS	N	HDIP	1-10	101-125	761,500/1	0.29	1.3	3.9
	N	HDIP	1-10	126-150	76,000/0	--	--	--
	N	HDIP	1-10	176-200	2,288/0	--	--	--
	N	PDIP	1-10	76-100	174,000/0	--	--	--
PMOS	N	HDIP	26-50	151-175	133,000/0	--	--	--
	N	PDIP	26-50	151-175	25,000/0	--	--	--
DTL	N	HFPK	1-10	126-150	231,000/0	--	--	--
ECL	N	HDIP	1-10	101-125	4,494,000/4	0.51	0.89	1.5
	N	HDIP	1-10	176-200	148,000/0	--	--	--
	N	HDIP	1-10	201-225	103,720/14	--	--	--
	N	HDIP	1-10	226-250	265,000/60	202.	226.	255.
	N	HDIP	1-10	251-275	61,250/24	--	--	--
	N	HDIP	11-25	101-125	1,180,000/1	0.19	0.85	2.5
	N	HDIP	11-25	126-150	434,000/0	--	--	--
	N	HDIP	11-25	151-175	787,000/1	0.28	1.3	3.8
	N	HDIP	11-25	176-200	200,000/26	108.	130.	156.
	N	PDIP	1-10	101-125	592,000/0	--	--	--
	N	PDIP	11-25	101-125	859,000/1	0.26	1.2	3.5
	N	PDIP	51-75	101-125	90,000/0	--	--	--
	N	HFPK	1-10	101-125	1,106,000/1	0.20	0.90	2.7
	N	HFPK	1-10	101-125	1,106,000/1	0.20	0.90	2.7
HTTL	B-1	HDIP	1-10	126-150	502,000/0	--	--	3.2
	B-1	HDIP	11-25	126-150	179,000/0	--	--	--
	B-1	HFPK	1-10	126-150	253,000/0	--	--	--
	B-1	HFPK	11-25	126-150	147,000/0	--	--	--
	N	HDIP	11-25	126-150	45,000/0	--	--	--
	N	PDIP	1-10	126-150	45,000/0	--	--	--

TABLE 46: GENERIC FAILURE RATES
STATIC FORWARD BIAS LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
LTL	C-1 N	HDIP PDIP	26-50 1-10	126-150	76,000/0	--	--	--
				126-150	53,668/2	--	--	--
STTL	N N	PDIP PDIP	1-10 1-10	126-150	100,000/0	--	--	--
				151-175	35,280,000/0	--	--	0.046
LSTTL	N N	HDIP PDIP	1-10 1-10	101-125	29,000/0	--	--	--
				101-125	32,000/0	--	--	--
TTL	B-1 B-1 B-1 B-1 B-1 C-1 C-1 C-1 N N N N N	HDIP HDIP HDIP HDIP HFPK HDIP HDIP HDIP HDIP PDIP HFPK HFPK	1-10 11-25 26-50 51-75 11-25 1-10 26-50 51-75 1-10 1-10 1-10 1-10 1-10	126-150	358,000/1	0.62	2.8	8.4
				126-150	717,000/0	--	--	2.2
				126-150	353,500/3	4.3	8.5	16.
				151-175	222,668/2	3.7	9.0	19.
				126-150	218,862/1	--	--	--
				126-150	105,000/1	--	--	--
				151-175	261,000/0	--	--	--
				151-175	182,000/0	--	--	--
				76-100	3,679,000/4	0.62	1.1	1.8
				126-150	1,525,000/7	3.1	4.6	6.7
				126-150	254,000/1	0.88	3.9	12.
				201-225	64,000/0	--	--	--

TABLE 47: GENERIC FAILURE RATES
STORAGE LIFE TESTS

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
CMOS	C-1	HDIP	1-10	201-225	112,452/7	--	--	--
	N	HDIP	1-10	126-150	121,000/0	--	--	--
	N	HDIP	11-25	126-150	110,000/0	--	--	--
	N	HDIP	26-50	126-150	55,000/0	--	--	--
	N	PDIP	1-10	126-150	231,000/0	--	--	--
DTL	A-2	HFPK	1-10	126-150	930,000/0	--	--	1.7
	B-1	HDIP	1-10	126-150	34,000/0	--	--	--
	B-1	HFPK	1-10	126-150	194,000/0	--	--	--
	B-2	HDIP	1-10	126-150	177,000/0	--	--	--
	B-2	HFPK	1-10	126-150	112,000/1	--	--	--
	B-2	CAN	1-10	126-150	90,000/0	--	--	--
	B-2	CAN	11-25	126-150	11,000/0	--	--	--
	C-1	HDIP	1-10	126-150	3,120,000/2	0.26	0.64	1.4
	C-1	HFPK	1-10	126-150	1,986,000/1	0.11	0.50	1.5
	C-2	HDIP	1-10	126-150	104,000/0	--	--	--
	N	HDIP	1-10	126-150	1,689,000/2	0.49	1.2	2.5
	N	HDIP	11-25	126-150	25,000/0	--	--	--
	N	HDIP	26-50	126-150	85,000/0	--	--	--
	N	PDIP	1-10	126-150	6,299,000/5	0.49	0.79	1.3
	N	HFPK	1-10	101-125	208,000/0	--	--	--
	N	HFPK	1-10	126-150	2,349,000/1	0.095	0.43	1.3
	N	HFPK	1-10	151-175	15,000/0	--	--	--
	N	CAN	1-10	126-150	666,000/0	--	--	2.4
ECL	N	HDIP	1-10	101-125	419,328/0	--	--	--
	N	HDIP	1-10	126-150	1,723,000/1	0.13	0.58	1.7
	N	HDIP	1-10	151-175	116,526/0	--	--	--
	N	HDIP	1-10	176-200	177,000/0	--	--	--
	N	HDIP	1-10	226-250	418,500/3	3.7	7.2	13.
	N	HDIP	1-10	276-300	215,000/1	--	--	--
	N	HDIP	11-25	126-150	372,000/0	--	--	--
	N	HDIP	11-25	226-250	69,750/0	--	--	--
	N	HDIP	11-25	276-300	162,000/1	--	--	--
	N	HDIP	26-50	126-150	92,000/0	--	--	--
	N	HDIP	51-75	276-300	49,000/1	--	--	--
	N	HFPK	1-10	126-150	36,000/0	--	--	--
	N	HFPK	1-10	276-300	32,256/0	--	--	--

TABLE 47: GENERIC FAILURE RATES
STORAGE LIFE TESTS (Cont'd)

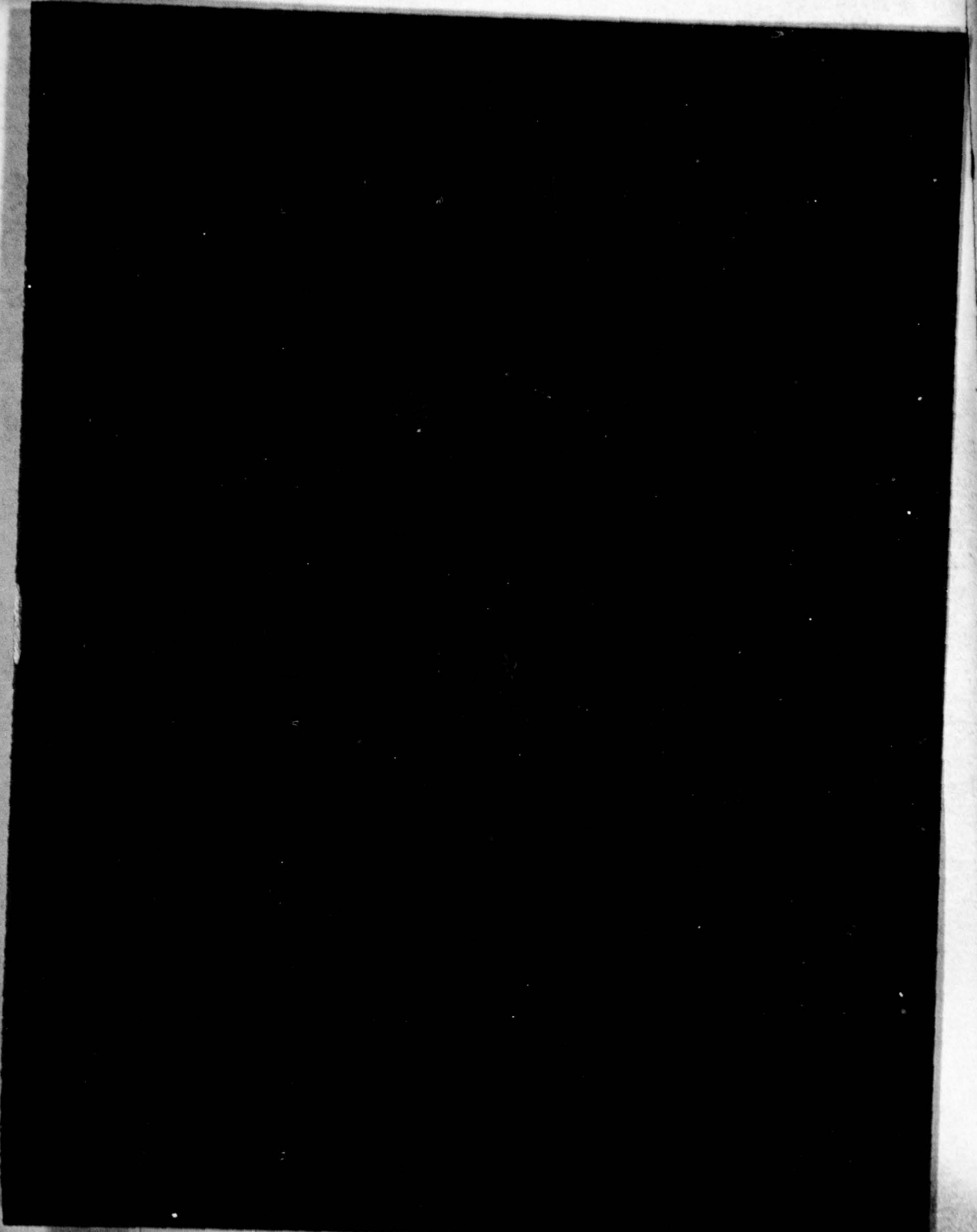
OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	λ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
HTTL	B-1	HDIP	1-10	126-150	561,000/2	1.5	3.6	7.6
	B-1	HDIP	11-25	126-150	80,000/0	--	--	--
	B-1	HFPK	1-10	126-150	303,000/1	0.74	3.3	9.9
	B-1	HFPK	11-25	126-150	25,000/0	--	--	--
	B-2	HFPK	1-10	126-150	55,000/0	--	--	--
	C-1	HDIP	1-10	126-150	89,000/0	--	--	--
	C-2	HDIP	1-10	126-150	215,000/0	--	--	--
	C-2	HDIP	11-25	126-150	33,000/0	--	--	--
	N	HDIP	1-10	126-150	222,000/0	--	--	--
	N	HDIP	11-25	126-150	38,000/0	--	--	--
	N	PDIP	1-10	126-150	490,000/1	0.46	2.0	6.1
	N	PDIP	11-25	126-150	72,000/1	--	--	--
	N	HFPK	1-10	126-150	80,000/0	--	--	--
	N	HFPK	11-25	126-150	77,000/1	--	--	--
	X	HDIP	1-10	126-150	504,000/1	0.44	2.0	5.9
	X	HDIP	11-25	126-150	185,000/1	--	--	--
LTTL	B-1	HDIP	1-10	126-150	182,000/0	--	--	--
	B-1	HDIP	11-25	126-150	77,000/0	--	--	--
	B-1	HFPK	1-10	126-150	131,328/0	--	--	--
	B-1	HFPK	11-25	126-150	22,126/0	--	--	--
	C-1	HDIP	26-50	126-150	38,000/0	--	--	--
	N	HDIP	1-10	126-150	52,000/0	--	--	--
	N	HDIP	1-10	276-300	61,900/0	--	--	--
	N	HDIP	11-25	126-150	222,000/0	--	--	--
	N	HDIP	26-50	126-150	74,000/0	--	--	--
	N	HDIP	51-75	126-150	80,000/0	--	--	--
	N	PDIP	1-10	126-150	511,000/1	0.39	1.8	5.2
	N	PDIP	11-25	126-150	92,000/0	--	--	--
	N	PDIP	51-75	126-150	46,000/0	--	--	--
	N	HFPK	1-10	126-150	2,290,000/0	--	--	0.70
	N	HFPK	26-50	126-150	74,000/0	--	--	--
	N	HFPK	51-75	126-150	17,000/0	--	--	--
STTL	N	HDIP	1-10	126-150	106,000/0	--	--	--
	N	HDIP	1-10	226-250	105,000/0	--	--	--
	N	HDIP	1-10	276-300	40,500/0	--	--	--
	N	HDIP	11-25	226-250	105,000/4	--	--	--

TABLE 47: GENERIC FAILURE RATES
STORAGE LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (°C)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% (F/10 ⁶)	$\hat{\lambda}$ (F/10 ⁶)	UPPER 80% (F/10 ⁶)
STTL (Cont'd)	N	HDIP	11-25	276-300	40,500/2	--	--	--
	N	PDIP	1-10	126-150	680,000/6	5.7	8.8	13.
	N	PDIP	11-25	126-150	138,000/0	--	--	--
LSTTL	N	HDIP	1-10	126-150	2,599,000/2	0.32	0.77	1.6
	N	HDIP	1-10	226-250	70,000/0	--	--	--
	N	HDIP	1-10	276-300	27,000/0	--	--	--
	N	HDIP	11-25	226-250	52,500/0	--	--	--
	N	HDIP	11-25	276-300	67,500/1	--	--	--
	N	PDIP	1-10	126-150	617,000/1	0.36	1.6	4.9
	N	PDIP	11-25	126-150	92,000/0	--	--	--
	N	PDIP	51-75	126-150	46,000/0	--	--	--
TTL	B-1	HDIP	1-10	126-150	2,095,551/5	1.5	2.4	3.8
	B-1	HDIP	11-25	126-150	1,142,000/1	0.20	0.88	2.6
	B-1	HDIP	26-50	126-150	352,304/0	--	--	--
	B-1	HDIP	51-75	126-150	38,000/0	--	--	--
	B-1	HFPK	1-10	126-150	1,938,304/1	0.12	0.51	1.5
	B-1	HFPK	11-25	126-150	609,000/0	--	--	2.6
	B-1	HFPK	26-50	126-150	64,000/0	--	--	--
	B-1	HFPK	51-75	126-150	82,000/0	--	--	--
	B-2	HDIP	1-10	126-150	360,000/0	--	--	--
	B-2	HDIP	11-25	126-150	122,000/0	--	--	--
	B-2	HDIP	26-50	126-150	105,000/0	--	--	--
	B-2	HFPK	1-10	126-150	570,000/0	--	--	2.8
	B-2	HFPK	11-25	126-150	272,000/0	--	--	--
	B-2	HFPK	26-50	126-150	45,000/0	--	--	--
	C-1	HDIP	1-10	126-150	1,089,000/1	0.20	0.92	2.8
	C-1	HDIP	11-25	126-150	414,000/1	0.54	2.4	7.2
	C-1	HDIP	26-50	126-150	165,000/0	--	--	--
	C-1	HDIP	51-75	126-150	55,000/0	--	--	--
	C-1	HFPK	1-10	126-150	362,000/0	--	--	--
	C-1	HFPK	1-10	276-300	90,000/0	--	--	--
	C-2	HDIP	1-10	126-150	108,000/0	--	--	--
	C-2	HDIP	26-50	126-150	22,000/0	--	--	--

TABLE 47: GENERIC FAILURE RATES
STORAGE LIFE TESTS (Cont'd)

OPERATIONAL TYPE	SCREEN CLASS	PACKAGE	NUMBER OF GATES	TEST CONDITIONS (t_0)	NUMBER PART HOURS/ NUMBER FAILED	LOWER 20% ($F/10^6$)	λ ($F/10^6$)	UPPER 80% ($F/10^6$)
TTL (Cont'd)	C-2	HFPK	1-10	126-150	111,000/0	--	--	--
	C-2	HFPK	51-75	126-150	55,000/0	--	--	--
	N	HDIP	1-10	126-150	6,009,000/7	0.79	1.2	1.7
	N	HDIP	11-25	126-150	2,139,000/4	1.1	1.9	3.1
	N	HDIP	26-50	126-150	476,000/0	--	--	--
	N	HDIP	51-75	126-150	637,000/1	0.35	1.6	4.7
	N	PDIP	1-10	126-150	11,960,300/19	1.3	1.6	2.0
	N	PDIP	11-25	126-150	1,564,000/9	4.1	5.8	8.0
	N	PDIP	26-50	126-150	515,000/0	--	--	3.1
	N	PDIP	51-75	126-150	223,000/0	--	--	--
	N	HFPK	1-10	126-150	1,475,000/0	--	--	1.1
	N	HFPK	11-25	126-150	1,689,000/0	--	--	0.95
	N	HFPK	26-50	126-150	505,000/0	--	--	3.2
	N	HFPK	51-75	126-150	639,000/0	--	--	2.5
	X	HDIP	1-10	126-150	275,000/0	--	--	--
	X	HDIP	11-25	126-150	389,000/0	--	--	--
	X	HDIP	26-50	126-150	156,000/0	--	--	--
	X	HDIP	51-75	126-150	38,000/0	--	--	--
	X	HFPK	1-10	126-150	7,000/0	--	--	--
	X	CAN	26-50	126-150	77,000/0	--	--	--



Section 2

DIGITAL DEVICE DATA - DETAILED LISTINGS - INTRODUCTION

The data presented in Section 2 have been extracted from reports dealing with digital microcircuit, SSI and MSI complexity devices. LSI random logic and memory devices are featured under a separate cover, entitled Memory/LSI Data. The data in this section include field experience, life test results, equipment reliability demonstration and production test results, and equipment checkout test results. The calendar time period for all of the listed data entries is 1974 to the present. The listings are grouped according to a two-level hierarchy, arranged first by operational type (CMOS, PMOS, DTL, ECL, HTTL, LTTL, STTL, LSTTL, SUHL, TTL) and second by device manufacturer (sorted in alphabetical order within each operational type). Part numbers are listed in a left-hand justified numerical format and, within each identical part number category, are further sorted by decreasing screen class quality (A-1 down to NONE). Due to the left-hand justification process, care should be taken when referencing a specific part number (see Usage Guide).

The information presented may be utilized to generate representative failure rates for various device classifications. All of the details needed to perform a MIL-HDBK-217B reliability prediction are provided within each line entry. The means for failure rate analyses by package type, operational type, etc. are also available. The use of this format facilitates failure rate comparisons between reliability demonstration tests and actual field experience, or between life test results and subsequent field data results, thus providing a valuable source of back-up information for testing programs. The user is cautioned that the data contained herein may not be used in lieu of other contractually cited references and specifications.

The listed data furnish an indication of the anticipated performance for various part types. As always, however, the user must take into account the base population of the device under consideration, as well as the amount of testing involved, prior to drawing any conclusions.

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A Usage Guide follows, which should be referenced by the user to familiarize himself with the format, terminology and abbreviations utilized in the detailed listings. Additional information may, again, be obtained by contacting the Reliability Analysis Center directly.

USAGE GUIDE

The description given below is for the format and codes of this section. The circled numbers shown on the tabulation form below refer to the explanatory texts which follow. A few minutes familiarizing oneself with the information supplied below will aid user interpretation of the data contained herein.

DIGITAL DEVICE DATA

RELIABILITY ANALYSIS CENTER													
:MANUFACTURER													
:OPERATIONAL TYPE													
: PART	: DEVICE	: SCRN.	: PACKAGE/	: JCT.*	: EQUIP.	: DATA	: STRESS	: #TESTED/	: REMARKS				
: NO.	: FUNCTION	: CLASS	: PINS	: TEMP.	: TYPE	: CLASS.	: LEVEL	: #FAILED	:				
:	:	:	:	:	:	:	:	:	:				
:	:	: NO.	: CHIP	: TEST	: APPL.	: TEST	:	: PART	:				
:	:	: GATES	: PROTECT.	: DATE	: ENV.	: TYPE	:	: HOURS	:				
:	:	:	:	:	:	:	:	:	:				
③	④	⑤	⑦	⑨	⑪	⑬	⑮	⑰	⑬				
:	:	⑥	⑧	⑩	⑫	⑭	:	⑱	:				
:	:	:	:	:	:	:	:	:	:				

- ① **MANUFACTURER.** Denotes the manufacturer of the tested devices. Manufacturers are arranged alphabetically within each operational type. The term "VARIOUS" is used to indicate parts produced by two or more manufacturers. This term is often used where second sourcing of equipment level parts occurs.
- ② **OPERATIONAL TYPE.** Reflects the terminology of the devices (CMOS, PMOS, DTL, ECL, HTTL, L TTL, STTL, SUHL, TTL).
- ③ **PART NO.** These are listings of the device part number, neglecting package and temperature rating suffixes. Part numbers are arranged in left-hand justified numerical order. Thus, a sequence of the following part numbers is possible: 5408, 54107, 5411, 74160, 8162.
- ④ **DEVICE FUNCTION.** Provides the basic intended generic application of the referenced PART NO.
- ⑤ **SCRN. CLASS.** Screen class is listed in order of decreasing quality within each part number category. These screening codes are of the same basic form as found in MIL-HDBK-217B, with some variations.

JA	MIL-M-38510, Class A (JAN)	JC	MIL-M-38510, Class C (JAN)
A-1	MIL-STD-883B, Method 5004, Class A	C-1	MIL-STD-883B, Method 5004, Class C
A-2	Vendor Equivalent of A-1	C-2	Vendor Equivalent of C-a
JB	MIL-M-38510, Class B (JAN)	X	Nonstandard Screening Including a Burn-In Test
B1/JB	Combination of JAN and B-1 parts	NONE	No Screening Beyond Normal Vendor's QC (Class D or D-1)
B-1	MIL-STD-883B, Method 5004, Class B	N.R.	Not Reported
B-2	Vendor Equivalent of B-1		

USAGE GUIDE (Cont'd)

- ⑥ NO. GATES. The MIL-HDBK-217B complexity (number of gates) is derived from logic diagrams or, when necessary, by dividing the number of transistors by four (see MIL-HDBK-217B, Section 2.1-1). If the gate complexity is unknown, the field appears as a blank.

- ⑦ PACKAGE/PINS. Indicates the package construction and the number of pins per package.

PACKAGE PREFIXES:

AL	Aluminum	H	Hermetic
AU	Gold	KVR	Kovar
C	Ceramic (Al ₂ O ₃ , TiO ₂ , BeO ₂)	M/G	Metal/Glass
CM	Ceramic Metal (Kovar/Al ₂ O ₃ , Kovar/BeO ₂ , Kovar/Alumina Filled Glass)	NI	Nickel
EA	Epoxy A	PH	Phenolic
EB	Epoxy B	QTZ	Quartz
EC	Ceramic with Epoxy Seal	S	Silicone
		SN	Tin

PACKAGE SUFFIXES:

CAN	Metal Can	LLS	Leadless Package
DIP	Dual In-Line Package	QIP	Quad In-Line Package (similar to DIP, staggered leads)
FPK	Flat Package	SQR	Square Package
INL	In-Line Package		

- ⑧ CHIP PROTECT. Chip (Die) Protection. The information in this section corresponds to the glassivation, passivation coatings on the die as well as any material used to interface the die to the package.

BSI02	Boron-doped silicate	SI3N4	Silicon nitride passivation
SLCNE	Silicone. Often used in plastic packages to reduce thermal coefficient mismatch	GLASS	A generic term for a glassivation layer used when the specific material is unknown
SI02	Silicon dioxide. Standard passivation material	PSG	Phosphorous-doped silicate

- ⑨ JCT.* TEMP. Junction Temperature (T_J). The asterisk is included to remind the user that the junction temperature is based on estimated ambient conditions and must therefore be considered an estimate itself. This quantity, expressed in degrees centigrade (°C), is calculated from the highest ambient temperature listed in "stress level" as follows:

$$T_J = T_A + \theta_{JA} P_{TYP}$$

where:

T _J	=	Junction Temperature (°C)
T _A	=	Ambient Temperature (°C)
θ _{JA}	=	Junction to Ambient Thermal Resistance (°C/watt)
P _{TYP}	=	Typical Power Dissipation (watts)

USAGE GUIDE (Cont'd)

Where either the thermal resistance or the typical power dissipation quantities are not known, the following estimate (see MIL-HDBK-217B Section 2.1.5-3) is used:

$$\frac{T_J}{T_A} = \frac{T_A}{T_A} + 10^\circ\text{C if the number of transistors} \leq 120$$

$$\frac{T_J}{T_A} = \frac{T_A}{T_A} + 25^\circ\text{C if the number of transistors} > 120$$

Note: The number of transistors is approximately equal to four times the number of gates.

- ⑩ TEST DATE. The test date indicates the reported end of device operation date. Blanks indicate unknown dates. Testing completed prior to 1974 was considered obsolete and is excluded from the detailed section of this publication.

- ⑪ EQUIP. TYPE. Equipment type entries pertain to the actual use of the devices. This information in conjunction with the application environment "APPL. ENV." gives a good indication of the manner in which the devices were used.

CALC	Calculating equipment	NAVIGATE	Navigation equipment
COMB/NOG	Combinational equipment	POWER	Power supplies
	(not otherwise classified)	RADAR	Radar equipment
COMMUNIC	Communications	REORDER	Signal Recorder
CONTROL	Control equipment	RECONN	Reconnaissance
DIG PROC	Digital processors (computation)	SIG PROC	Signal processing (buffers, converters, amplifiers)
DISPLAY	Instrumentation and Display	SONAR	Sonar equipment
N.A.	Not Applicable (part level testing)		

- ⑫ APPL. ENV. Applications environment symbols are synonymous with many of the environmental symbols used in MIL-HDBK-217B.

AI	Airborne, Inhabited	GT	Ground, Transportable (carried by vehicle)
AIU	Airborne, Inhabited/Uninhabited	MGB	Missile, Ground, Benign (see GBM)
AU	Airborne, Uninhabited	ML	Missile, Launch and Flight
GB	Ground, Benign, Military	N.A.	Not Applicable (part level testing)
GBC	Ground, Benign, Commercial	NS	Naval, Sheltered
	(commercial equipment, environmentally controlled conditions)	NSS	Naval, Sheltered, Submarine
GBM	Ground, Benign, Missile (see MGB)	NU	Naval, Unsheltered
GF	Ground, Fixed	SF	Space, Flight
GM	Ground, Mobile, Inhabited		
GNU	Ground, Mobile, Uninhabited		
GP	Ground, Portable (able to be hand-carried)		

- ⑬ TEST TYPE. Test terms for this section are listed below. Where sequences of tests occur, the tests are listed in sequential order.

ACCLIFE	Accelerated Life Test	DYN OP	Dynamic Operation Life Test
CNST OP	Constant Operation Life Test	D&F EM	Dynamic and Functional Electrical Measurements
DYN EM	Dynamic Electrical Measurements	EM	Electrical Measurements

USAGE GUIDE (Cont'd)

FNCT EM	Functional Electrical Measurement	RNGCNT	Ring Counter Life Test
HTVIBPC	High Temperature, Vibration, and Power Cycle Test	SDF EM	Static, Dynamic and Functional Electrical Measurements
HUMLIFE	Humidity Life (nonoperating) Test	SOLDER	Solderability Test
INTLIFE	Intermittent Life Test	STAT EM	Static Electrical Measurements
LTVIBPC	Low Temperature, Vibration, and Power Cycle Test	STGLIFE	Storage Life Test
MECHSHK	Mechanical Shock Test	S&D EM	Static and Dynamic Electrical Measurements
N.A.	Not Applicable (equipment level testing)	TCVIBPC	Temperature Cycle, Vibration, and Power Cycle Test
OP&HTRB	Dynamic Operation and High Temperature Reverse Bias Test	TEMPCYC	Temperature Cycle Test
PMR CYC	Power Cycle Test	VIBRFTG	Vibration Fatigue Test
PAR EXC	Parallel Excitation Life Test	VIBRDM	Random Vibration Test
REVBIA	Reverse Bias Life Test	VIBR VF	Variable Frequency Vibration Tests
RHOPCNS	Relative Humidity Life Test with Constant Operation	VISINSP	Visual Inspection

14 DATA CLASS. The data classifications consist of two pieces of information. The first indicates the specific format of testing performed, while the second indicates who performed the testing and reported the results. This latter item is important to consider in terms of interpretation of the data.

LIFE	Long-Term Part Level Life Testing (>250 hours per part)	I	Independent Test Lab
CHECK	Equipment Level Checkout Testing	G	Government Agency
REL	Equipment Level Reliability Demonstration Testing	Q	User or Manufacturer with Government Approval
		U	Device User
		V	Vendor (Manufacturer) of Device

Note: Only "ON" time is reported. Total test duration can be determined from the percentage of "ON" time listed in the "STRESS LEVEL" field.

RELPR	Equipment Level Production Reliability Testing
FIELD	Equipment Level Field Experience

15 STRESS LEVEL. This column contains available information concerning the test conditions. The higher temperature listed (where applicable) is used in determining the junction temperature, "JCT. * TEMP.", of the devices under test. Percentages apply to the percentage of applied power, the per cent "ON" time (listed after the number of Gs for power cycling tests), the percentage of applied vibration, or, when labeled "RH", to the relative humidity. One hundred per cent of rated power should be assumed, if not stated. Descriptors used are listed below:

ATMOS	Pressure (in atmospheres)	C	Degrees Centigrade
AXES	As Defined in MIL-STD-883B	CY or	Number of Cycles
		CYC	

USAGE GUIDE (Cont'd)

DEG	Degrees	MSEC	Milliseconds
E	Each	OZ	Ounces
FLUOR	Fluorocarbon	%	Percent
G	Gravitational Acceleration	PSIG	Pounds per Square Inch, Gauge
	Constant		Note: PSIG = PSIA + 15 at sea level
GMS/MSQ	Grams per Square Meter	RADIS	Radioisotope
HE	Helium	RH	Relative Humidity
HZ	Hertz	SEC	Seconds
K	Kilo (1000)	V.CYC	Voltage Cycle (followed by the percent voltage applied)
MIN	Minutes		Times (Repetitive action)
MIN OIL	Mineral Oil (Silicon oil UCON 100)	X	

①⑥ #TESTED/#FAILED. The number tested is reported only for life testing, since this constitutes the only part level testing detailed in this section. Reporting the number of devices tested for systems (as in field, reliability demonstration, and equipment checkout testing) is generally inaccurate as the individual parts may have varied testing durations depending on part replacement, and whether the systems under test maintain a constant configuration.

If more than one test record has an identical test background (all information identical except for the number tested, number failed, and test dates) the records are considered for merging. The merging process sums the number tested, number failed, and part hours of similar test records. Record merging is performed if the data successfully meets a parametric homogeneity test (Fisher F-test) at the 25 per cent significance level. If the records do not qualify for merging, the number tested, number failed, part hours, and the test dates are printed uniquely for each distinct test population.

①⑦ PART HOURS. This number represents the product of the number of devices tested, "#TESTED/#FAILED", and the number of hours over which they were tested. The "E**" notation indicates ten raised to the "E**" power. Thus, "5.90E04" is equivalent to fifty-nine thousand (59,000) part hours.

①⑧ REMARKS. This column is utilized for additional pertinent test, device, or failure information. Failure information will generally indicate the number of devices failed for each set of failure modes and mechanisms listed.

DIGITAL DEVICE DATA

FAIRCHILD
CMOS:MANUFACTURER
:OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

: PART NO. :	: DEVICE FUNCTION :	: SCRN. CLASS :	: PACKAGE/ PINS :	: JCT.* TEMP. :	: EQUIP. TYPE :	: DATA CLASS. :	: STRESS LEVEL :	: #TESTED/ : : #FAILED :	: REMARKS :
:	:	: NO. :	: CHIP : : GATES :	: TEST : : DATE :	: APPL. : : ENV. :	: TEST : : TYPE :	:	: PART : : HOURS :	:
: 34011 :	: GATE :	: NONE :	: EADIP 14 :	: 85C :	: NA :	: LIFE U :	: 085C 85XRH :	: 72/ 23 :	:
:	: N.R. :	: 4 :	: INORGANIC :	: 77/77 :	: NA :	: HUMLIFE :	:	: 5.99E 04 :	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 49/ 49 :	:
:	:	:	:	:	:	:	:	: 0. :	:

HARRIS
CMOS:MANUFACTURER
:OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

: PART NO. :	: DEVICE FUNCTION :	: SCRN. CLASS :	: PACKAGE/ PINS :	: JCT.* TEMP. :	: EQUIP. TYPE :	: DATA CLASS. :	: STRESS LEVEL :	: #TESTED/ : : #FAILED :	: REMARKS :
:	:	: NO. :	: CHIP : : GATES :	: TEST : : DATE :	: APPL. : : ENV. :	: TEST : : TYPE :	:	: PART : : HOURS :	:
: 40XX :	: N.R. :	: C-2 :	: DIP 0 :	: 95C :	: NA :	: LIFE V :	: 085C :	: 142/ 0 :	:
:	: N.R. :	:	: INORGANIC :	: 75/76 :	: NA :	: OP CNST :	:	: 1.42E 05 :	:
:	:	:	:	: 75/76 :	:	:	:	: 1252/ 3 :	: 1/SHORT
:	:	:	:	:	:	:	:	: 2.10E 06 :	: HANDLING
:	:	:	:	:	:	:	:	:	: 1/SHORT
:	:	:	:	:	:	:	:	:	: HANDLING
:	:	:	:	:	:	:	:	:	: 1/SHORT
:	:	:	:	:	:	:	:	:	: HANDLING
: 40XX :	: N.R. :	: C-2 :	: KVRDIP 0 :	: 135C :	: NA :	: LIFE V :	: 125C :	: 1926/ 4 :	: 1/DEGRADED
:	: N.R. :	:	: INORGANIC :	: 75/76 :	: NA :	: OP CNST :	:	: 4.63E 06 :	: SURFACE
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
:	:	:	:	:	:	:	:	:	: SURFACE
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
: 40XX/48XX :	: N.R. :	: C-2 :	: KVRDIP 0 :	:	: NA :	: LIFE V :	:	: 1800/ 2 :	: 1/DEGRADED
:	: N.R. :	:	: INORGANIC :	: 72/74 :	: NA :	: OP CNST :	:	: 1.80E 06 :	: SURFACE
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
: 54CXX :	: N.R. :	: C-2 :	: KVRDIP 14 :	: 135C :	: NA :	: LIFE V :	: 125C :	: 849/ 3 :	: 1/DEGRADED
:	: N.R. :	:	: INORGANIC :	: 75/76 :	: NA :	: OD&HTRB :	:	: 1.71E 06 :	: SURFACE
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
:	:	:	:	:	:	:	:	:	: METAL
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
:	:	:	:	: 75/76 :	:	:	:	: 1431/ 4 :	: 1/DEGRADED
:	:	:	:	:	:	:	:	: 2.51E 05 :	: SURFACE
:	:	:	:	:	:	:	:	:	: 1/DEGRADED
:	:	:	:	:	:	:	:	:	: METAL
:	:	:	:	:	:	:	:	:	: 2/DEGRADED
: 54CXXX :	: N.R. :	: C-2 :	: KVRDIP 0 :	: 135C :	: NA :	: LIFE V :	: 125C :	: 582/ 1 :	: 1/DEGRADED
:	: N.R. :	:	: INORGANIC :	: 75/76 :	: NA :	: OD&HTRB :	:	: 7.99E 05 :	:
: 74CXXX :	: N.R. :	: C-2 :	: DIP 0 :	: 95C :	: NA :	: LIFE V :	: 085C :	: 105/ 0 :	:
:	: N.R. :	:	: INORGANIC :	: 75/76 :	: NA :	: OP CNST :	:	: 1.83E 05 :	:

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DIGITAL DEVICE DATA

MOTOROLA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
14001	GATE N.R.	NONE 4	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 18V	220/ 1 1.19E 05	1/DEGRADED	
14001	GATE N.R.	D.O. 4	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 15V	92/ 0 4.60E 05		
14002	GATE N.R.	NONE 2	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 10V	30/ 0 1.68E 05		
14002	GATE N.R.	NONE 2	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C	224/ 1 2.24E 05	1/DEGRADED	
14002	GATE N.R.	NONE 2	KVRDIP 14 INORGANIC	40C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 0 5.81E 05		
14002	GATE N.R.	NONE 2	EADIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 85% 085C 70%	222/ 2 6.89E 05	2/SHORT	
14007	INVERTER N.R.	NONE 3	KVRDIP 14 ORGANIC	85C /74	NA NA	LIFE V REVBias	085C 15V	46/ 0 9.20E 04		
14008	ADDER FULL	NONE 58	EADIP 16 ORGANIC	85C /74	NA NA	LIFE V REVBias	085C 70%	79/ 1 3.37E 05	1/DEGRADED	
14011	GATE N.R.	NONE 4	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 18V	120/ 0 3.60E 05		
14011	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	40C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 2 5.70E 06		
14011	GATE N.R.	NONE 4	EADIP 14 ORGANIC	85C /74	NA NA	LIFE V REVBias	085C	95/ 0 9.50E 04		
14011	GATE N.R.	NONE 4	EADIP 14 INORGANIC	126C /77	NA NA	LIFE I OP DYN	125C	205/ 0 6.21E 05		
						EM		205/ 4 0.		
14011	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUMLIFE	085C 85XRN	72/ 17 6.63E 04		
						FNCT EM	025C	55/ 23 0.		
14011	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUMLIFE	085C 85XRN	50/ 1 2.47E 04		
						FNCT EM	025C	49/ 0 0.		
14011	GATE N.R.	NONE 4	EADIP 14 INORGANIC	41C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 48 1.41E 08		
14012	GATE N.R.	NONE 2	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 10V	90/ 0 5.16E 05		

DIGITAL DEVICE DATA

MOTOROLA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14012	GATE N.R.	NONE 2	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 15V	97/ 1 2.91E 05	1/DEGRADED
14012	GATE N.R.	NONE 2	EADIP 14 ORGANIC	85C /74	NA NA	LIFE V REVBias	085C 70X	119/ 0 3.57E 05	
14013	FLIPFLOP D	NONE 24	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C	75/ 0 3.75E 04	
14013	FLIPFLOP D	NONE 24	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUMILIFE	085C 85XRH	200/ 4 1.47E 05	
						FNCT EM	025C	196/ 3 0.	
14013	FLIPFLOP D	NONE 24	EADIP 14 INORGANIC	48C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 76 1.14E 08	
14015	SHIFT REG N.R.	NONE 58	KVRDIP 16 INORGANIC	47C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 4 7.75E 05	
14021	SHIFT REG N.R.	NONE 55	KVRDIP 16 ORGANIC	85C /74	NA NA	LIFE V REVBias	085C 15V	80/ 0 2.40E 05	
14022	COUNTER N.R.	NONE 39	SNDIP 16 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C	49/ 0 1.47E 05	
14023	GATE N.R.	NONE 3	EADIP 14 ORGANIC	85C /74	NA NA	LIFE V REVBias	085C	96/ 0 9.60E 04	
14025	GATE N.R.	NONE 3	KVRDIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C 18V	75/ 2 2.99E 05	2/DEGRADED
14025	GATE N.R.	NONE 3	KVRDIP 14 INORGANIC	41C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 0 2.78E 06	
14025	GATE N.R.	NONE 3	EADIP 14 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C	95/ 0 4.75E 04	
14027	FLIPFLOP JK	NONE 30	KVRDIP 16 ORGANIC	125C /74	NA NA	LIFE V REVBias	125C	40/ 0 8.00E 04	
14027	FLIPFLOP JK	NONE 30	EADIP 16 ORGANIC	136C /74	NA NA	LIFE V N.A.	125C 85X 085C 70X	132/ 1 1.11E 05	1/DEGRADED
14028	DECODER BCD/DECIMAL	NONE 35	KVRDIP 16 INORGANIC	41C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 0 3.37E 06	
14028	DECODER BCD/DECIMAL	NONE 35	EADIP 16 INORGANIC	86C 77/77	NA NA	LIFE U RHOC	085C 85XRH	50/ 1 3.68E 04	
						FNCT EM	025C	49/ 1 0.	

DIGITAL DEVICE DATA

MOTOROLA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14028	DECODER	NONE	EADIP 16	86C	NA	LIFE U	085C 85ZRH	50/ 1	
	BCD/DECIMAL	35	INORGANIC	77/77	NA	RHOC		2.47E 04	
						FNCT EM	025C	49/ 0	
								0.	
14028	DECODER	NONE	EADIP 16	41C	DISPLAY	FIELD U	040C 55XPWR	/ 1	
	BCD/DECIMAL	35	INORGANIC	75/77	GBC	N.A.		4.36E 06	
14507	GATE	NONE	KVRDIP 14	41C	DISPLAY	FIELD U	040C 55XPWR	/ 2	
	N.R.	4	INORGANIC	75/77	GBC	N.A.		7.75E 05	
14508	LATCH	NONE	KVRDIP 24	125C	NA	LIFE V	125C 15V	60/ 0	
	N.R.		ORGANIC	/74	NA	REVBias		1.80E 05	
14514	DECODER	NONE	KVRDIP 24	125C	NA	LIFE V	125C	48/ 0	
	LATCH	86	ORGANIC	/74	NA	REVBias		1.44E 05	
14519	GATE	NONE	KVRDIP 16	125C	NA	LIFE V	125C	87/ 0	
	N.R.	23	ORGANIC	/74	NA	REVBias		2.92E 04	
14528	FLIPFLOP	NONE	EADIP 16	131C	NA	LIFE V	125C	250/ 2	
	MONOSTABLE	32	INORGANIC	/77	NA	OP DYN		2.49E 05	
						EM		247/ 0	
								0.	
14532	ENCODER	NONE	EADIP 16	125C	NA	LIFE V	125C 85Z	26/ 0	
	N.R.	39	ORGANIC	/74	NA	REVBias	085C 70Z	1.04E 05	
14539	MULTIPLEXER	NONE	EADIP 16	125C	NA	LIFE V	125C	47/ 0	
	N.R.	26	ORGANIC	/74	NA	REVBias		4.70E 04	
74C00	GATE	NONE	EADIP 14	125C	NA	LIFE V	125C	25/ 0	
	N.R.	4	INORGANIC	/76	NA	REVBias		2.50E 04	
						EM		25/ 0	
								0.	
74C02	GATE	NONE	EADIP 14	125C	NA	LIFE V	125C	90/ 0	
	N.R.	4	INORGANIC	/76	NA	REVBias		9.00E 04	
						EM		90/ 0	
								0.	
74C74	FLIPFLOP	NONE	EADIP 14	125C	NA	LIFE V	125C	38/ 2	1/SHORT
	D	12	INORGANIC	/76	NA	REVBias		3.73E 04	1/DEGRADED
						EM		36/ 1	1/DEGRADED
								0.	
74C74	FLIPFLOP	NONE	EADIP 14	45C	DISPLAY	FIELD U	040C 55XPWR	/ 0	
	D	12	INORGANIC	75/77	GBC	N.A.		2.42E 04	

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	150C /74	NA NA	LIFE V STGLIFE	150C	10/ 0 1.00E 04	
						STAT EM	025C	10/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	115/ 0 2.30E 05	
						S&D EM		115/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	60/ 0 6.00E 04	
						S&D EM		60/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	88/ 1 8.75E 04	
						S&D EM		88/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	25/ 0 2.50E 04	
						S&D EM		25/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	24/ 0 2.40E 04	
						S&D EM		24/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	8/ 0 8.00E 03	
						S&D EM		8/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	64/ 0 6.40E 04	
						S&D EM		64/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	22/ 0 2.20E 04	
						S&D EM		22/ 0 0.	

DIGITAL DEVICE DATA

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP ROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /74	NA NA	LIFE V OP CNST	125C	44/ 0 4.40E 04	
						STAT EM	025C	44/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP DYN	125C	25/ 0 2.50E 04	
						S&D EM		25/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /74	NA NA	LIFE V OP DYN	125C	25/ 0 2.50E 04	
						EM		25/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	85C /74	NA NA	LIFE V HUMILIFE	085C 85XRH	10/ 0 1.00E 04	
						STAT EM	025C	10/ 0 0.	
4001	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	181C /75	NA NA	LIFE V ACC OC	180C	10/ 0 1.04E 03	
						S&D EM		10/ 0 0.	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBIA	125C	25/ 0 2.50E 04	
						EM		25/ 0 0.	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBIA	125C	120/ 0 1.20E 05	
						EM		120/ 0 0.	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBIA	125C	438/ 0 8.76E 05	
						EM		438/ 1 0.	1/DEGRADED
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBIA	125C	110/ 0 2.20E 05	
						EM		110/ 1 0.	1/DEGRADED

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBias	125C	300/ 0 3.00E 05	
						EM		300/ 1 0.	1/ OPEN
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBias	125C	60/ 1 5.95E 04	1/SHORT
						EM		59/ 0 0.	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBias	125C	120/ 1 2.38E 05	1/SHORT
						EM		119/ 0 0.	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBias	125C	90/ 1 1.79E 05	1/DEGRADED
						EM		89/ 0 0.	
4001	GATE N.R.	NONE 4	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBias	125C	300/ 1 8.99E 05	1/ OPEN
						EM		299/ 0 0.	

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
4007A	INVERTER N.R.	C-1 3	SMDIP 14 INORGANIC	200C 74/76	NA NA	LIFE Q ACC RB	200C V 100X	35/ 17 8.57E 04	6/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/SHORT WIRE 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 2/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 2/DEGRADED OXIDE PROCESS DES : 2/DEGRADED OXIDE PROCESS DES : 74/76 40/ 34 6.14E 04 1/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/DEGRADED OXIDE CONTAMINATION: 3/DEGRADED OXIDE CONTAMINATION: 2/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/SHORT WIRE 2/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE : 6/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE : 9/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE : 6/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE :		

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4007A	INVERTER N.R.	C-1 3	SNDIP 14 INORGANIC	225C 74/76	NA NA	LIFE Q ACC RB	225C V 100%	35/ 16 8.54E 04	3/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE PROCESS DES: OXIDE PROCESS DES: 2/DEGRADED OXIDE PROCESS DES: 1/DEGRADED OXIDE PROCESS DES: 1/DEGRADED OXIDE PROCESS DES: 1/DEGRADED OXIDE PROCESS DES: 40/ 35 4.92E 04 5/DEGRADED OXIDE CONTAMINATION: 2/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/DEGRADED OXIDE PROCESS DES: WIRE 1/DEGRADED THRM FATIGUE: TEMPERATURE: 7/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE: 1/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE: 14/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE:

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4007A	INVERTER N.R.	C-1 3	SDIP 14 INORGANIC	225C 74/76	NA NA	LIFE Q ACC RB	225C V 67X	35/ 14 8.87E 04	1/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/SHORT WIRE 1/ OPEN EXT LEAD HANDLING WORKMANSHIP 1/SHORT WIRE 1/SHORT WIRE 1/SHORT WIRE 1/DEGRADED OXIDE CONTAMINATION: 3/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED OXIDE CONTAMINATION: 40/ 30 8.50E 04 4/DEGRADED OXIDE CONTAMINATION: 2/SHORT WIRE 1/SHORT WIRE 14/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE 9/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4007A	INVERTER N.R.	C-1 3	SNDIP 14 INORGANIC	250C 74/76	NA NA	LIFE Q ACC RB	250C V 100%	35/ 17 8.27E 04	3/DEGRADED OXIDE	
									CONTAMINATION:	
									1/DEGRADED	
									OXIDE	
									CONTAMINATION:	
									1/SHORT	
									WIRE	
									1/DEGRADED	
									OXIDE	
									CONTAMINATION:	
									1/SHORT	
									WIRE	
									1/DEGRADED	
									OXIDE	
									CONTAMINATION:	
									1/DEGRADED	
									OXIDE	
									CONTAMINATION:	
									1/SHORT	
									WIRE	
									1/DEGRADED	
									METAL	
									ELECTRO MIGR:	
									PROCESS CONT:	
									1/DEGRADED	
									OXIDE	
									CONTAMINATION:	
									1/SHORT	
									WIRE	
									1/DEGRADED	
									METAL	
									ELECTRO MIGR:	
									OVERSTRESS	
									2/DEGRADED	
									OXIDE	
									PROCESS DES	
				74/76				40/ 35	5/DEGRADED	
								3.60E 04	OXIDE	
									CONTAMINATION:	
									1/DEGRADED	
									OXIDE	
									CONTAMINATION:	
									1/SHORT	
									WIRE	
									1/SHORT	
									WIRE	
									1/DEGRADED	
									OXIDE	
									PROCESS DES	
									6/DEGRADED	
									OXIDE	
									PROCESS DES	
									1/DEGRADED	
									PKG SEAL	
									THRM FATIGUE:	
									TEMPERATURE	
									14/DEGRADED	
									PKG SEAL	
									THRM FATIGUE:	
									TEMPERATURE	
									5/DEGRADED	
									PKG SEAL	
									THRM FATIGUE:	
									TEMPERATURE	

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4007A	INVERTER N.R.	C-1 3	SHDIP 14 INORGANIC	250C 74/76	NA NA	LIFE Q ACC RB	250C V 33X	35/ 11 1.05E 05	1/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE PROCESS DES 1/SHORT WIRE 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 74/76 40/ 21 8.11E 04 9/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/SHORT WIRE 1/SHORT WIRE 3/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE 6/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE	

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4007A	INVERTER N.R.	C-1 3	SNDIP 14 INORGANIC	250C 74/76	NA NA	LIFE Q ACC RB	250C V 67X	35/ 19 8.23E 04	1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/SHORT WIRE 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED OXIDE CONTAMINATION: 1/DEGRADED METAL ELECTRO MIGR: PROCESS CONT: 1/DEGRADED OXIDE CONTAMINATION: 2/DEGRADED OXIDE PROCESS DES 1/DEGRADED OXIDE PROCESS DES 1/DEGRADED OXIDE PROCESS DES 1/ OPEN WIRE BOND THERMO CHEM TEMPERATURE 3/DEGRADED OXIDE CONTAMINATION: 1/ OPEN WIRE BOND THERMO CHEM TEMPERATURE 1/SHORT WIRE 1/DEGRADED OXIDE PROCESS DES 40/ 37 4.11E 04 10/DEGRADED OXIDE CONTAMINATION: 1/SHORT WIRE 1/SHORT WIRE 1/SHORT WIRE 1/SHORT WIRE 1/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE 1/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE 14/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE 7/DEGRADED PKG SEAL THRM FATIGUE: TEMPERATURE	

DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4011	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUNLIFE	085C 85XRM	72/ 15 6.19E 04		
						FNCT EM	025C	57/ 1 0.		
4013	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBIA	125C	25/ 0 2.30E 04		
						EM		25/ 0 0.		
4019	GATE N.R.	NONE 12	EADIP 16 INORGANIC	42C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 4 2.06E 07		
4601A	GATE N.R.	NONE 4	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	25/ 0 2.30E 04		
						STAT EM	025C	25/ 0 0.		
4601A	GATE N.R.	NONE 4	KVRDIP 14 N.R.	126C /74	NA NA	LIFE V OP CNST	125C	60/ 0 6.00E 04		
						STAT EM	025C	60/ 0 0.		
4601A	GATE N.R.	NONE 4	KVRDIP 14 N.R.	85C /74	NA NA	LIFE V HUNLIFE	085C 85XRM	25/ 0 2.50E 04		
						STAT EM	025C	25/ 0 0.		
54C00	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	181C /75	NA NA	LIFE V ACC OC	180C	12/ 0 1.25E 03		
						S&D EM		12/ 0 0.		
54C02	GATE N.R.	NONE 4	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	15/ 0 1.50E 04		
						S&D EM		15/ 0 0.		
54C04	INVERTER N.R.	NONE 6	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP DYN	125C	15/ 0 1.50E 04		
						S&D EM		15/ 0 0.		
54C10	GATE N.R.	NONE 3	SNDIP 14 INORGANIC	126C /75	NA NA	LIFE V OP CNST	125C	17/ 0 1.70E 04		
						S&D EM		17/ 0 0.		
54C160	COUNTER DECADE	B-1 51	SNDIP 16 INORGANIC	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 4.20E 03		
74C10	GATE N.R.	NONE 3	EADIP 14 INORGANIC	125C /76	NA NA	LIFE V REVBIA	125C	300/ 0 3.00E 05		
						EM		300/ 0 0.		

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4001	GATE	NONE	AUDIP 14		COMB/MOC	FIELD Q		/ 0		
	N.R.	4	INORGANIC	74/75	GF	N.A.		9.27E 04		
4001	GATE	NONE	SDIP 14		COMB/MOC	FIELD Q	020C	/ 0		
	N.R.	4	INORGANIC	72/74	GF	N.A.		9.08E 04		
4001A	GATE	B-1	AUDIP 14	56C	DIG PROC	REL Q	-055C 055C	/ 0		
	N.R.	4	INORGANIC	75/75	AIU	TCVPC	73CY2.2G 80X	1.22E 05		
4007	INVERTER	B-1	AUDIP 14	225C	NA	LIFE Q	225C V 100X	35/ 18	1/MECHANICAL	
	N.R.	3	INORGANIC	73/75	NA	ACC RB		1.07E 05	EXT LEAD	
									ELECTRO CHEM:	
									WORKMANSHIP	
									1/DEGRADED	
									OXIDE	
									ELECTRO CHEM:	
									PROCESS CONT:	
									1/DEGRADED	
									OXIDE	
									ELECTRO CHEM:	
									PROCESS CONT:	
									1/DEGRADED	
									DIE	
									PROCESS CONT:	
									1/DEGRADED	
									DIE	
									PROCESS CONT:	
									2/DEGRADED	
									DIE	
									PROCESS CONT:	
									3/DEGRADED	
									DIE	
									PROCESS CONT:	
									1/DEGRADED	
									GLASS	
									PROCESS CONT:	
									1/DEGRADED	
									GLASS	
									PROCESS CONT:	
4007	INVERTER	C-1	AUDIP 14	225C	NA	LIFE Q	225C	20/ 5	1/DEGRADED	
	N.R.	3	INORGANIC	73/75	NA	STGLIFE		6.45E 04	PROCESS CONT:	
									1/DEGRADED	
									PROCESS CONT:	
									1/SHORT	
									METAL	
									APPLICATION	
									WORKMANSHIP	
									1/CATASTROPHIC	
									EXT LEAD	
									HANDLING	
									APPLICATION	
4007	INVERTER	C-1	AUDIP 14	126C	NA	LIFE Q	125C 100X	70/ 62	40/DEGRADED	
	N.R.	3	INORGANIC	73/75	NA	OP DYN		1.30E 05	SURFACE	
									ELECTRO MIGR:	
									PROCESS CONT:	
									22/DEGRADED	
									SURFACE	
									ELECTRO MIGR:	
									PROCESS CONT:	

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	200C 73/75	NA NA	LIFE Q ACC RB	200C V 100X	70/ 52 1.00E 03	2/DEGRADED OXIDE PROCESS CONT: 1/CATASTROPHIC: EXT LEAD HANDLING APPLICATION 2/DEGRADED SURFACE PROCESS CONT: 1/DEGRADED PROCESS CONT: 2/DEGRADED SURFACE PROCESS CONT: 2/DEGRADED SURFACE PROCESS CONT: 1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 9/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 9/DEGRADED SURFACE PROCESS CONT: 2/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 1/DEGRADED SURFACE PROCESS CONT: 3/DEGRADED PROCESS CONT: 1/DEGRADED GLASS PROCESS CONT:		

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	225C 73/75	NA NA	LIFE Q ACC RB	225C V 100X	35/ 20 1.22E 05	1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 1/DEGRADED DIE PROCESS CONT: 1/DEGRADED GLASS PROCESS CONT: 1/DEGRADED DIE PROCESS CONT: 1/DEGRADED DIE PROCESS CONT: 1/DEGRADED GLASS PROCESS CONT: 2/DEGRADED DIE PROCESS CONT:	
4007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	225C 73/75	NA NA	LIFE Q ACC RB	225C V 50X	35/ 19 8.38E 04	1/DEGRADED DIE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 1/SHORT 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 1/DEGRADED DIE PROCESS CONT: 1/DEGRADED GLASS PROCESS CONT: 1/DEGRADED SURFACE PROCESS CONT: 2/DEGRADED PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED GLASS PROCESS CONT: 1/DEGRADED SURFACE PROCESS CONT: 3/DEGRADED PROCESS CONT: 1/DEGRADED DIE PROCESS CONT:	

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
4007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	250C 73/75	NA MA	LIFE Q ACC RB	250C V 100X	35/ 34 2.80E 04	1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT: 2/DEGRADED SURFACE PROCESS CONT: 1/DEGRADED PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 2/CATASTROPHIC: EXT LEAD HANDLING APPLICATION 6/DEGRADED SURFACE PROCESS CONT: 1/DEGRADED DIE PROCESS CONT: 2/DEGRADED DIE PROCESS CONT: 1/DEGRADED GLASS PROCESS CONT: 1/DEGRADED SURFACE PROCESS CONT: 2/DEGRADED GLASS PROCESS CONT: 3/DEGRADED GLASS PROCESS CONT: 1/DEGRADED OXIDE ELECTRO CHEM: PROCESS CONT:		
4011A	GATE N.R.	A-1 4	AUFFK 14 INORGANIC	150C 75/75	NA NA	LIFE Q STGLIFE	150C	77/ 0 7.70E 04			
4011A	GATE N.R.	A-1 4	AUFFK 14 INORGANIC	126C 75/75	NA NA	LIFE Q OP CNST	125C	129/ 0 6.45E 04			
4011A	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUNLIFE	085C 85%RH	72/ 7 3.37E 04			
						FNCT EM	025C	65/ 3 0.			

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4011A	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUNLIFE	085C 85XRH	72/ 6 6.73E 04	
						FNCT EM	025C	66/ 5 0.	
4011A	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUNLIFE	085C 85XRH	50/ 9 3.10E 04	
						FNCT EM	025C	41/ 9 0.	
4011A	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUNLIFE	085C 85XRH	72/ 1 3.57E 04	
						FNCT EM	025C	71/ 3 0.	
4012A	GATE N.R.	B-1 2	AUDIP 14 INORGANIC	56C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 4.57E 04	
4013	FLIPFLOP D	A-1 24	AUFFK 14 INORGANIC	42C 72/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 5.15E 04	
4013A	FLIPFLOP D	A-1 24	AUDIP 14 INORGANIC	150C 75/75	NA NA	LIFE Q STGLIFE	150C	77/ 1 7.70E 04	1/DELTA
4013A	FLIPFLOP D	A-1 24	AUDIP 14 INORGANIC	141C 75/75	NA NA	LIFE Q OP CNST	125C	129/ 0 1.29E 05	
4013A	FLIPFLOP D	B-1 24	AUDIP 14 INORGANIC	71C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 1.98E 05	
4014	SHIFT REG N.R.	A-1 55	AUDIP 16 INORGANIC	132C 75/75	NA NA	LIFE V OP DYN	125C	133/ 1 1.33E 05	
4015A	SHIFT REG N.R.	B-1 58	AUDIP 16 INORGANIC	62C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 6.09E 04	
4017A	COUNTER DECADE	NONE 47	EADIP 16 INORGANIC	52C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 0 1.06E 06	
4019A	GATE N.R.	A-1 12	AUFFK 16 INORGANIC	150C 74/74	NA NA	LIFE Q STGLIFE	150C	77/ 0 7.70E 04	
4019A	GATE N.R.	A-1 12	AUFFK 16 INORGANIC	127C 74/74	NA NA	LIFE Q OP CNST	125C	129/ 0 6.45E 04	
						SDF EM	-055C 025C 125C	129/ 1 0.	1/MECHANICAL EXT LEAD
4023A	GATE N.R.	B-1 3	KVRDIP 14 INORGANIC	51C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.54E 03	
4023A	GATE N.R.	B-1 3	KVRDIP 14 INORGANIC	51C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.01E 03	
4023A	GATE N.R.	B-1 3	AUDIP 14 INORGANIC	56C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 7.62E 04	
4025A	GATE N.R.	B-1 3	AUDIP 14 INORGANIC	56C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 3.05E 04	
4028A	DECODER BCD/DECIMAL	B-1 38	AUDIP 16 INORGANIC	57C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 7.62E 04	
4029A	COUNTER N.R.	B-1 64	AUDIP 16 INORGANIC	62C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 1.52E 04	
4030A	GATE N.R.	B-1 4	AUDIP 14 INORGANIC	56C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 1.52E 04	
4050A	INTERFACE TRANSLATOR	B-1 6	AUDIP 16 INORGANIC	55C 75/75	DIG PROC AIU	REL Q TCVPC	-055C 055C 73CY2.2G 80X	/ 0 3.05E 04	

DIGITAL DEVICE DATA

SIGNETICS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
14001	GATE	NONE	DIP 14	150C	NA	LIFE V	150C	32/ 0		
	N.R.	4	N.R.	74/74	NA	STGLIFE		6.40E 04		
						EM		32/ 0		
								0.		
14001	GATE	NONE	DIP 14	150C	NA	LIFE V	150C	31/ 0		
	N.R.	4	N.R.	74/74	NA	STGLIFE		6.20E 04		
						EM		31/ 0		
								0.		
14001	GATE	NONE	DIP 14	150C	NA	LIFE V	150C	50/ 0		
	N.R.	4	N.R.	74/74	NA	STGLIFE		5.00E 04		
						EM		50/ 0		
								0.		
14001	GATE	NONE	DIP 14	85C	NA	LIFE V	085C	50/ 0		
	N.R.	4	N.R.	74/74	NA	REVBias		2.50E 04		
						EM		50/ 0		
								0.		
14001	GATE	NONE	DIP 14	125C	NA	LIFE V	125C	30/ 0		
	N.R.	4	N.R.	74/74	NA	REVBias		1.50E 04		
						EM		30/ 0		
								0.		
14001	GATE	NONE	DIP 14	125C	NA	LIFE V	125C	28/ 0		
	N.R.	4	N.R.	74/74	NA	REVBias		1.40E 04		
						EM		28/ 0		
								0.		
14001	GATE	NONE	DIP 14	125C	NA	LIFE V	125C	47/ 0		
	N.R.	4	N.R.	74/74	NA	REVBias		4.70E 04		
						EM		47/ 3	3/DEGRADED	
								0.		
14001	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	48/ 0		
	N.R.	4	N.R.	74/74	NA	STGLIFE		4.80E 04		
						EM		48/ 0		
								0.		
14001	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	50/ 0		
	N.R.	4	N.R.	74/75	NA	STGLIFE		1.00E 05		
						EM		50/ 0		
								0.		

DIGITAL DEVICE DATA

SIGNETICS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14001	GATE	NONE	KVRDIP 14	125C	NA	LIFE V	125C	45/ 0	
	N.R.	4	N.R.	74/75	NA	OP DYN		9.00E 04	
						EM		45/ 0	
								0.	
14001	GATE	NONE	KVRDIP 14	125C	NA	LIFE V	125C	45/ 0	
	N.R.	4	N.R.	74/74	NA	REVBIA		4.50E 04	
						EM		45/ 0	
								0.	
14001	GATE	NONE	KVRDIP 14		NA	LIFE V	-010C	24/ 0	
	N.R.	4	N.R.	74/75	NA	REVBIA		2.40E 04	
						EM		24/ 1	1/CATASTROPHIC
								0.	OXIDE
14001	GATE	NONE	AUDIP 14	150C	NA	LIFE V	150C	50/ 0	
	N.R.	4	N.R.	74/75	NA	STGLIFE		1.00E 05	
						EM		50/ 1	1/CATASTROPHIC
								0.	OXIDE
14001	GATE	NONE	AUDIP 14	125C	NA	LIFE V	125C	45/ 0	
	N.R.	4	N.R.	74/75	NA	OP DYN		9.00E 04	
						EM		45/ 0	
								0.	
14001	GATE	NONE	AUDIP 14		NA	LIFE V	-010C	25/ 0	
	N.R.	4	N.R.	74/75	NA	REVBIA		2.50E 04	
						EM	-010C	25/ 0	
								0.	
14011	GATE	NONE	DIP 14	150C	NA	LIFE V	150C	53/ 0	
	N.R.	4	N.R.	74/74	NA	STGLIFE		1.59E 05	
						EM		53/ 0	
								0.	
14011	GATE	NONE	DIP 14	85C	NA	LIFE V	085C	60/ 0	
	N.R.	4	N.R.	74/74	NA	REVBIA		6.00E 04	
						EM		60/ 3	2/CATASTROPHIC
								0.	1/DEGRADED
14011	GATE	NONE	DIP 14	85C	NA	LIFE V	085C	60/ 0	
	N.R.	4	N.R.	74/74	NA	REVBIA		1.80E 05	
						EM		60/ 0	
								0.	
14011	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	30/ 0	
	N.R.	4	N.R.	74	NA	STGLIFE		3.00E 04	

DIGITAL DEVICE DATA

SIGNETICS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4011	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	30/ 0		
	N.R.	4	N.R.	74/74	NA	STGLIFE		3.00E 04		
						EM		30/ 0		
								0.		
4011	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C	28/ 0		
	N.R.	4	N.R.	/74	NA	OP CNST		2.80E 04		
4011	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C	28/ 0		
	N.R.	4	N.R.	74/74	NA	REVBias		2.80E 04		
						EM		28/ 0		
								0.		
4011	GATE	NONE	SDIP 14	150C	NA	LIFE V	150C	30/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		3.00E 04		
4011	GATE	NONE	SDIP 14	150C	NA	LIFE V	150C	30/ 0		
	N.R.	4	N.R.	74/74	NA	STGLIFE		3.00E 04		
						EM		30/ 0		
								0.		
4011	GATE	NONE	SDIP 14	85C	NA	LIFE V	085C	29/ 0		
	N.R.	4	N.R.	/74	NA	OP CNST		2.90E 04		
4011	GATE	NONE	SDIP 14	85C	NA	LIFE V	085C	29/ 0		
	N.R.	4	N.R.	74/74	NA	REVBias		2.90E 04		
						EM		29/ 0		
								0.		

DIGITAL DEVICE DATA

SOLID STATE SC CMOS		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4001A	GATE N.R.	NONE 4	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 2.75E 03	
						EM		55/ 0 0.	
4001A	GATE N.R.	NONE 4	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
						EM		55/ 0 0.	
4001A	GATE N.R.	NONE 4	AUDIP 14 INORGANIC	135C /75	NA NA	LIFE V OP DYN	125C	105/ 0 1.05E 05	
						EM		105/ 0 0.	
4001A	GATE N.R.	NONE 4	AUDIP 14 INORGANIC	135C /75	NA NA	LIFE V OP DYN	125C	44/ 0 8.80E 04	
						EM		44/ 0 0.	
4001A	GATE N.R.	NONE 4	AUDIP 14 INORGANIC	135C /75	NA NA	LIFE V OP DYN	125C	105/ 0 2.10E 05	
						EM		105/ 0 0.	
4007A	INVERTER N.R.	B-1 3	AUDIP 14 INORGANIC	135C /75	NA NA	LIFE V OP DYN	125C	105/ 0 1.05E 05	
						EM		105/ 1 0.	1/DEGRADED
4007A	INVERTER N.R.	NONE 3	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 2.75E 05	
						EM		55/ 0 0.	
4007A	INVERTER N.R.	NONE 3	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
						EM		55/ 0 0.	
4007A	INVERTER N.R.	NONE 3	AUDIP 14 INORGANIC	135C /75	NA NA	LIFE V OP DYN	125C	39/ 0 2.73E 05	
						EM		39/ 0 0.	

DIGITAL DEVICE DATA

SOLID STATE SC CMOS		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4007A	INVERTER	NONE	AUDIP 14	135C	NA	LIFE V	125C	105/ 0	
	N.R.	3	INORGANIC	/75	NA	OP DYN		2.10E 05	
						EM		105/ 0	
								0.	
4011A	GATE	B-1	AUDIP 14	135C	NA	LIFE V	125C	105/ 0	
	N.R.	4	INORGANIC	/75	NA	OP DYN		1.05E 05	
						EM		105/ 0	
								0.	
4011A	GATE	B-1	AUDIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/76	AI	TCVPC	11CY 2.2G70X	1.94E 04	
4011A	GATE	B-1	AUDIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/76	AI	TCVPC	15CY 2.2G70X	2.81E 04	
4011A	GATE	B-1	AUDIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	140CY2.2G70X	1.17E 04	
4011A	GATE	B-1	AUDIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/76	AI	TCVPC	11CY 2.2G70X	1.58E 04	
4011A	GATE	B-1	AUDIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	74/76	AI	TCVPC	16CY 2.2G70X	2.28E 04	
4011A	GATE	NONE	KVRDIP 14	126C	NA	LIFE V	125C	87/ 0	
	N.R.	4	INORGANIC	/75	NA	OP DYN		2.59E 05	
						EM		87/ 0	
								0.	
4011A	GATE	NONE	AUDIP 14	135C	NA	LIFE V	125C	95/ 0	
	N.R.	4	INORGANIC	/75	NA	OP DYN		4.64E 05	
						EM		95/ 0	
								0.	
4012A	GATE	NONE	KVRDIP 14	126C	NA	LIFE V	125C	50/ 0	
	N.R.	2	INORGANIC	/75	NA	OP DYN		2.50E 05	
						EM		50/ 0	
								0.	
4012A	GATE	NONE	KVRDIP 14	126C	NA	LIFE V	125C	45/ 0	
	N.R.	2	INORGANIC	/75	NA	OP DYN		4.50E 04	
						EM		45/ 0	
								0.	
4013A	FLIPFLOP	NONE	KVRDIP 14	150C	NA	LIFE V	150C	27/ 0	
	D	24	INORGANIC	/75	NA	STGLIFE		1.35E 05	
						EM		27/ 0	
								0.	

DIGITAL DEVICE DATA

SOLID STATE SC CMOS		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4013A	FLIPFLOP	NONE	KVRDIP 14	150C	NA	LIFE V	150C	28/ 0		
	D	24	INORGANIC	/75	NA	STGLIFE		1.40E 03		
						EM		28/ 0		
								0.		
4014A	SHIFT REG	B-1	AUDIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	N.R.	55	INORGANIC	75/76	AI	TCVPC	11CY 2.2G70X	3.87E 04		
4014A	SHIFT REG	B-1	AUDIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	N.R.	55	INORGANIC	75/76	AI	TCVPC	15CY 2.2G70X	5.62E 04		
4014A	SHIFT REG	B-1	AUDIP 16	80C	COMMUNIC	REL C	-054C 055C	/ 0		
	N.R.	55	INORGANIC	75/75	AI	TCVPC	140CY2.2G70X	2.35E 04		
4014A	SHIFT REG	B-1	AUDIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	55	INORGANIC	75/76	AI	TCVPC	11CY 2.2G70X	3.15E 04		
4014A	SHIFT REG	B-1	AUDIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	55	INORGANIC	74/76	AI	TCVPC	16CY 2.2G70X	4.55E 04		
4023A	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	3	INORGANIC	/75	NA	STGLIFE		1.65E 05		
						EM		55/ 0		
								0.		
4023A	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	3	INORGANIC	/75	NA	STGLIFE		5.50E 04		
						EM		55/ 0		
								0.		
4025A	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	3	INORGANIC	/75	NA	STGLIFE		2.20E 05		
						EM		55/ 0		
								0.		
4025A	GATE	NONE	KVRDIP 14	126C	NA	LIFE V	125C	105/ 0		
	N.R.	3	INORGANIC	/75	NA	OP DYN		1.05E 05		
						EM		105/ 0		
								0.		
4029A	COUNTER	NONE	KVRDIP 16	133C	NA	LIFE V	125C	60/ 0		
	N.R.	87	INORGANIC	/75	NA	OP DYN		3.00E 05		
						EM		60/ 0		
								0.		
4029A	COUNTER	NONE	KVRDIP 16	133C	NA	LIFE V	125C	93/ 0		
	N.R.	87	INORGANIC	/75	NA	OP DYN		1.86E 05		
						EM		93/ 0		
								0.		
4081A	GATE	NONE	KVRDIP 14	126C	NA	LIFE V	125C	98/ 0		
	N.R.	4	INORGANIC	/75	NA	OP DYN		3.90E 05		
						EM		98/ 0		
								0.		

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
14007	INVERTER N.R.	B-1 3	AUDIP 14 INORGANIC	235C 73/75	NA NA	LIFE Q ACC RB	225C V 100X	35/ 28 1.73E 03	8/DEGRADED OXIDE PROCESS CONT: 1/SHORT WIRE BOND WORKMANSHIP 3/DEGRADED OXIDE PROCESS CONT: 4/DEGRADED OXIDE PROCESS CONT: 6/DEGRADED OXIDE PROCESS CONT: 4/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT:	
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	235C 73/75	NA NA	LIFE Q STGLIFE	225C	15/ 2 5.80E 04	1/DEGRADED METAL PROCESS CONT: 1/DEGRADED METAL PROCESS CONT:	
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	135C 73/75	NA NA	LIFE Q OP DYN	125C 100X	105/ 29 4.74E 05	1/DEGRADED DIE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OVERSTRESS 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 10/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED METAL PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 4/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT:	

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	210C 73/75	NA NA	LIFE Q ACC RB	200C V 100X	70/ 57 1.40E 04	16/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 3/DEGRADED OXIDE PROCESS CONT: 5/DEGRADED OXIDE TEMPERATURE 6/DEGRADED OXIDE TEMPERATURE 6/DEGRADED OXIDE TEMPERATURE 10/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED SURFACE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 5/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 73/75 35/ 32 2.58E 03 1/MECHANICAL EXT LEAD HANDLING WORKMANSHIP 1/DEGRADED DIE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 14/DEGRADED OXIDE PROCESS CONT: 6/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT:

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	235C 73/75	NA NA	LIFE Q ACC RB	225C 50X	35/ 29 5.61E 03	7/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 5/DEGRADED OXIDE PROCESS CONT: 4/DEGRADED OXIDE PROCESS CONT: 6/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT:		
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	235C 73/75	NA NA	LIFE Q ACC RB	225C V 100X	35/ 34 2.24E 03	1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 7/DEGRADED OXIDE PROCESS CONT: 9/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 4/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 3/DEGRADED OXIDE PROCESS CONT: 3/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 14/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 3/DEGRADED OXIDE PROCESS CONT: 7/DEGRADED OXIDE PROCESS CONT: 3/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT:		

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14007	INVERTER	C-1	AUDIP 14	235C	NA	LIFE Q	225C V 50X	35/ 28	1/DEGRADED
	N.R.	3	INORGANIC	73/75	NA	ACC RB		1.51E 04	OXIDE
									PROCESS CONT:
									3/DEGRADED
									DIE
									PROCESS CONT:
									1/DEGRADED
									OXIDE
									PROCESS CONT:
									4/DEGRADED
									OXIDE
									PROCESS CONT:
									5/DEGRADED
									OXIDE
									PROCESS CONT:
									4/DEGRADED
									OXIDE
									REDUCTION
									PROCESS CONT:
									8/DEGRADED
									OXIDE
									PROCESS CONT:
									1/DEGRADED
									OXIDE
									PROCESS CONT:
									1/DEGRADED
14007	INVERTER	C-1	AUDIP 14	260C	NA	LIFE Q	250C V 100X	35/ 33	16/DEGRADED
	N.R.	3	INORGANIC	73/75	NA	ACC RB		1.13E 03	OXIDE
									PROCESS CONT:
									7/DEGRADED
									OXIDE
									PROCESS CONT:
									3/DEGRADED
									OXIDE
									PROCESS CONT:
									2/DEGRADED
									OXIDE
									PROCESS CONT:
									1/SHORT
									WIRE
									WORKMANSHIP
									2/DEGRADED
									OXIDE
									PROCESS CONT:
									2/DEGRADED
									SURFACE
									ELECTRO MIGR:
									PROCESS CONT:

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14007	INVERTER N.R.	C-1 3	AUDIP 14 INORGANIC	260C 73/75	NA NA	LIFE Q ACC RB	250C V 50X	35/ 31 1.01E 04	4/DEGRADED DIE TEMPERATURE 1/SHORT PACKAGE 1/DEGRADED DIE TEMPERATURE 1/DEGRADED OXIDE 2/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 5/DEGRADED OXIDE PROCESS CONT: 1/SHORT EXT LEAD ENVIRONMENT 4/DEGRADED OXIDE PROCESS CONT: 2/DEGRADED OXIDE PROCESS CONT: 6/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT: 1/DEGRADED OXIDE PROCESS CONT:
4001A	GATE N.R.	B1/JB 4	DIP 14 N.R.	65C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 14CY 2.2G70X	/ 0 4.05E 04	
4001A	GATE N.R.	B1/JB 4	DIP 14 N.R.	65C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 15CY 2.2G70X	/ 0 4.22E 04	
4001A	GATE N.R.	B1/JB 4	DIP 14 N.R.	65C 75/75	COMMUNIC AI	REL Q TCVPC	-054C 055C 140CY2.2G70X	/ 0 1.76E 04	
4001A	GATE N.R.	B1/JB 4	DIP 14 N.R.	65C 74/75	COMMUNIC AI	RELPR Q TCVPC	-054C 055C 16CY2.2G 70X	/ 1 1.99E 04	1/CATASTROPHIC
4001A	GATE N.R.	B1/JB 4	DIP 14 N.R.	65C 74/76	COMMUNIC AI	RELPR Q TCVPC	-054C 055C 16CY 2.2G70X	/ 0 4.05E 04	
4002A	GATE N.R.	B1/JB 2	DIP 14 N.R.	65C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 14CY 2.2G70X	/ 0 1.35E 04	
4002A	GATE N.R.	B1/JB 2	DIP 14 N.R.	65C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 15CY 2.2G70X	/ 0 1.41E 04	
4002A	GATE N.R.	B1/JB 2	DIP 14 N.R.	65C 75/75	COMMUNIC AI	REL Q TCVPC	-054C 055C 140CY2.2G70X	/ 0 1.17E 03	

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIF. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4002A	GATE	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	N.R.	2	N.R.	75/75	AI	TCVPC	140CY 2.2G 7	4.69E 03	
4002A	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	2	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	6.63E 03	
4002A	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	2	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.35E 04	
4007A	INVERTER	JB	DIP 14	35C	CONTROL	REL Q	025C	/ 0	
	N.R.	3	N.R.	76/76	MGB	EQP OP		1.15E 03	
4007A	INVERTER	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0	
	N.R.	3	N.R.	76/77	MGB	EQP OP		9.90E 03	
4008A	ADDER	B1/JB	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	FULL	58	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	2.70E 04	
4008A	ADDER	B1/JB	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	FULL	58	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	5.62E 04	
4008A	ADDER	B1/JB	DIP 16	80C	COMMUNIC	REL Q	-054C 055C	/ 0	
	FULL	58	N.R.	75/75	AI	TCVPC	140CY2.2G70X	1.17E 04	
4008A	ADDER	B1/JB	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	FULL	58	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.33E 04	
4008A	ADDER	B1/JB	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	FULL	58	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	2.70E 04	
4011A	GATE	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	2.90E 04	
4011A	GATE	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	2.70E 04	
4011A	GATE	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	1.41E 04	
4011A	GATE	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	140CY2.2G70X	1.52E 04	
4011A	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	4	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	3.43E 04	
4011A	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	4	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.77E 04	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	D	24	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	2.90E 04	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	D	24	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	5.40E 04	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	D	24	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	4.22E 04	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	D	24	N.R.	75/75	AI	TCVPC	140CY2.2G70X	3.51E 03	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	D	24	N.R.	75/75	AI	TCVPC	140CYC2.2G70	2.35E 04	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	D	24	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	4.76E 04	
4013A	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	D	24	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	4.46E 04	
4015A	SHIFT REG	B1/JB	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 1	1/DELTA
	N.R.	58	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	1.74E 05	
4015A	SHIFT REG	B1/JB	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	58	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	5.40E 04	

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4015A	SHIFT REG	B1/JB	DIP 16	80C	COMMUNIC	REL Q	-054C 055C	/ 0		
	N.R.	58	N.R.	75/75	AI	TCVPC	140CY2.2G70X	4.69E 04		
4015A	SHIFT REG	B1/JB	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	58	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.53E 05		
4015A	SHIFT REG	B1/JB	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	58	N.R.	75/76	AI	TCVPC	16CY 2.2G70X	2.08E 04		
4018A	DIVIDER	B1/JB	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 3	1/ OPEN	
	N.R.	57	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	1.74E 05	1/ OPEN	
									1/ OPEN	
4018A	DIVIDER	B1/JB	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	N.R.	57	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	5.40E 04		
4018A	DIVIDER	B1/JB	DIP 16	80C	COMMUNIC	REL Q	-054C 055C	/ 0		
	N.R.	57	N.R.	75/75	AI	TCVPC	140CY2.2G70X	4.69E 04		
4018A	DIVIDER	B1/JB	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 3	1/DEGRADED	
	N.R.	57	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.26E 05	1/ OPEN	
									PROCESS CONT:	
									1/ OPEN	
									APPLICATION	
				74/75				/ 4	1/CATASTROPHIC	
								2.65E 04	2/CATASTROPHIC	
									1/CATASTROPHIC	
4018A	DIVIDER	B1/JB	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	57	N.R.	75/76	AI	TCVPC	16CY 2.2G70X	2.08E 04		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	CHECK Q	-054C 055C	/ 2	1/ OPEN	
	N.R.	12	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	5.80E 04		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	N.R.	12	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	1.35E 04		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	N.R.	12	N.R.	75/76	AI	TCVPC	15CY 2.2G 70	1.41E 04		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	REL Q	-054C 055C	/ 0		
	N.R.	12	N.R.	75/75	AI	TCVPC	140CY2.2G70X	1.52E 04		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	12	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	4.87E 04		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	12	N.R.	75/76	AI	TCVPC	16CY 2.2G17X	2.12E 03		
4019A	GATE	B1/JB	DIP 16	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	12	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.55E 04		
4024	COUNTER	N.R.	DIP 14	50C	DIG PROC	FIELD U	025C	/ 0		
	BINARY	81	N.R.	76/78	GBC	N.A.		1.53E 05		
4024A	COUNTER	B1/JB	DIP 14	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	BINARY	81	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	1.35E 04		
4024A	COUNTER	B1/JB	DIP 14	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	BINARY	81	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	1.41E 04		
4024A	COUNTER	B1/JB	DIP 14	80C	COMMUNIC	REL Q	-054C 055C	/ 0		
	BINARY	81	N.R.	75/75	AI	TCVPC	140CY2.2G70X	5.86E 03		
4024A	COUNTER	B1/JB	DIP 14	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	BINARY	81	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	6.63E 03		
4024A	COUNTER	B1/JB	DIP 14	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	BINARY	81	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.35E 04		
4024A	COUNTER	B-1	DIP 14	50C	CONTROL	RELPR Q	025C	/ 0		
	BINARY	81	N.R.	76/77	MGB	EQP OP		2.48E 03		

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4025A	GATE	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	3	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	1.35E 04	
4025A	GATE	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	3	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	2.81E 04	
4025A	GATE	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	N.R.	3	N.R.	75/75	AI	TCVPC	140CY2.2G70X	5.86E 03	
4025A	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	3	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	6.63E 03	
4025A	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	3	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.35E 04	
4027A	FLIPFLOP	JB	DIP 16	35C	CONTROL	REL Q	025C	/ 0	
	JK	30	N.R.	76/76	MGB	EQP OP		1.15E 03	
4027A	FLIPFLOP	JB	DIP 16	35C	CONTROL	RELPR Q	025C	/ 0	
	JK	30	N.R.	76/77	MGB	EQP OP		9.90E 03	
4029A	COUNTER	B-1	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	BINARY/BCD	72	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	1.35E 04	
4029A	COUNTER	B-1	DIP 16	80C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	BINARY/BCD	72	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	1.41E 04	
4029A	COUNTER	B-1	DIP 16	80C	COMMUNIC	REL Q	-054C 055C	/ 0	
	BINARY/BCD	72	N.R.	75/75	AI	TCVPC	140CY2.2G70X	5.86E 03	
4029A	COUNTER	B-1	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	BINARY/BCD	72	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	6.63E 03	
4029A	COUNTER	B-1	DIP 16	80C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	BINARY/BCD	72	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.35E 04	
4030A	GATE	B-1	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	5.80E 04	
4030A	GATE	B-1	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	140CY2.2G70X	9.38E 03	
4030A	GATE	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	4	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	4.21E 04	
4030A	GATE	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	N.R.	4	N.R.	75/76	AI	TCVPC	16CY 2.2G70X	4.11E 03	
4049A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 1	1/ OPEN
	BUFFER	6	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	8.70E 04	
4049A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	9.46E 04	
4049A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	8.43E 04	
4049A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	75/75	AI	TCVPC	140CY2.2G70X	5.04E 04	
4049A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.10E 05	
4049A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	5.51E 04	
4050A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	75/76	AI	TCVPC	12CY 2.2G70X	8.70E 04	
4050A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0	
	BUFFER	6	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	4.05E 04	

DIGITAL DEVICE DATA

VARIOUS CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4050A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	BUFFER	6	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	4.22E 04		
4050A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0		
	BUFFER	6	N.R.	75/75	AI	TCVPC	140CY2.2G70X	3.17E 04		
4050A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	BUFFER	6	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.99E 04		
				74/75				/ 3	1/CATASTROPHIC	
								6.31E 04	2/ OPEN	
4050A	CONVERTER	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	BUFFER	6	N.R.	75/76	AI	TCVPC	16CY 2.2G70X	4.05E 04		
				74/76				/ 1	1/CATASTROPHIC	
								6.16E 03	CONTAMINATION:	

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DIGITAL DEVICE DATA

FAIRCHILD PMOS		:MANUFACTURER :OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
: PART : NO.	: DEVICE : FUNCTION	: SCRN. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS	:
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:	:
:3349	: SHIFT REG	: NONE	: EADIP 16	: 160C	: NA	: LIFE U	: 150C	: 38/ 0	:	:
:	: N.R.	:	: N.R.	: 72/75	: NA	: STGLIFE	:	: 3.80E 04	:	:
:3705	: MULTIPLEXER	: C-1	: KVRDIP 16	: 80C	: SONAR	: CHECK Q	: 070C	: / 0	:	:
:	: N.R.	: 13	: INORGANIC	: 72/74	: NSS	: OP CNST	:	: 1.28E 05	:	:
:	:	:	:	:	:	: EQP OP	: 025C	: / 0	:	:
:	:	:	:	:	:	:	:	: 1.28E 05	:	:
:	:	:	:	:	:	: EM	:	: / 62	:	:
:	:	:	:	:	:	:	:	: 0.	:	:

GEN INST PMOS		:MANUFACTURER :OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
: PART : NO.	: DEVICE : FUNCTION	: SCRN. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS	:
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:	:
:2009	: MULTIPLEXER	: A-1	: AUPFK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:	:
:	: N.R.	: 6	: N.R.	: 73/74	: SF	: N.A.	:	: 3.16E 06	:	:

MOTOROLA PMOS		:MANUFACTURER :OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
: PART : NO.	: DEVICE : FUNCTION	: SCRN. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS	:
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:	:
:18319	: N.R.	: NONE	: DIP 0	: 80C	: NA	: LIFE V	: 070C	: 0/ 2	:	:
:	: N.R.	:	: INORGANIC	: 75/75	: NA	: OP DYN	:	: 3.87E 05	:	:

DIGITAL DEVICE DATA

VARIOUS PNOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST PROTECT.	APPL. DATE	TEST ENV.	TEST TYPE	PART HOURS		
3705	MULTIPLEXER	N.R.	KVRDIP 16	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	13	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	1.79E 05		
				74/75				/ 1		
								1.79E 05		

DIGITAL DEVICE DATA

FAIRCHILD DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1812	GATE N.R.	NONE 4	EADIP 14 N.R.	160C 72/75	NA NA	LIFE U STGLIFE	150C	76/ 0 7.60E 04	
9040	FLIPFLOP RS	A-1 10	KVRFPK 14 N.R.	25C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.31E 07	
9041	GATE N.R.	A-1 2	KVRFPK 14 N.R.	25C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 5.08E 06	
9042	GATE EXPANDABLE	A-1 2	KVRFPK 14 N.R.	25C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.14E 06	
9043	GATE EXPANDABLE	A-1 2	KVRFPK 14 N.R.	25C 72/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.79E 06	
9044	GATE EXPANDABLE	A-1 2	KVRFPK 14 N.R.	35C 72/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.48E 05	
9046	GATE N.R.	A-1 4	KVRFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025	/ 0 1.14E 07	
9046	GATE N.R.	A-1 4	KVRFPK 14 N.R.	35C 72/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 9.65E 06	
9047	GATE N.R.	A-1 3	KVRFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 3.93E 06	
936	INVERTER N.R.	JB 6	KVRFPK 14 INORGANIC	78C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.23E 04	
936	INVERTER N.R.	JB 6	KVRFPK 14 INORGANIC	78C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.55E 04	
936	INVERTER N.R.	JB 6	KVRFPK 14 INORGANIC	78C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 8.48E 03	
936	INVERTER N.R.	B-1 6	KVRFPK 14 INORGANIC	78C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 3.06E 03	
936	INVERTER N.R.	B-1 6	KVRFPK 14 INORGANIC	78C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 3.87E 03	
936	INVERTER N.R.	B-1 6	KVRFPK 14 INORGANIC	78C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 2.12E 03	
9930	GATE EXPANDABLE	A-1 2	KVRFPK 14 N.R.	27C 72/74	COMB/NOC SF	FIELD U N.A.	025C 0	/ 0 1.24E 05	
9930	GATE EXPANDABLE	A-1 2	KVRFPK 14 N.R.	27C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.42E 05	
9935	INVERTER N.R.	C-1 6	KVRDIP 14 N.R.	80C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 4.28E 04	
						EQP OP	025C	/ 0 4.28E 04	
						EM		/ 1 0.	
9937	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	64C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 15CY 2.2G70X	/ 0 1.41E 04	
9937	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	64C 75/75	COMMUNIC AI	REL Q TCVPC	-054C 055C 140CY2.2G70X	/ 0 1.17E 03	
9937	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	64C 74/76	COMMUNIC AI	RELPR Q TCVPC	-054C 055C 16CY 2.2G70X	/ 0 1.14E 04	
9944	BUFFER N.R.	A-1 2	KVRFPK 14 N.R.	28C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 4.99E 05	
9945	FLIPFLOP RS	A-1 16	KVRFPK 14 N.R.	30C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 8.56E 05	
946	GATE N.R.	A-1 4	KVRFPK 14 N.R.	29C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.14E 05	

DIGITAL DEVICE DATA

FAIRCHILD DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST	APPL.	TEST		PART		
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS		
19931	FLIPFLOP MONOSTABLE	B-1	SNCAN 10	60C	DISPLAY	REL G	004C 051C	/ 0		
		6	N.R.	75/75	GT	EQP OP	18CY 95X	2.94E 03		

DIGITAL DEVICE DATA

HARRIS DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST	APPL.	TEST		PART		
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS		
1211	EXPANDER	A-1	AUFFK 14	35C	ICOMB/NOG	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	70/74	SF	N.A.		2.82E 06		

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. ° TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1852	FLIPFLOP	NONE	RADIP 14	70C	NA	LIFE U	070C	25/ 0	
	JK	16	N.R.	72/75	NA	REVBIA5		2.50E 04	
1852	FLIPFLOP	NONE	RADIP 14	85C	NA	LIFE U	085C 85ERN	25/ 1	
	JK	16	N.R.	72/75	NA	RNRB		2.50E 04	
19093	FLIPFLOP	B-1	KVRFPK 14	150C	NA	LIFE V	150C	14/ 0	
	JK	16	N.R.	/74	NA	STGLIFE		1.40E 04	
19093	FLIPFLOP	B-1	KVRFPK 14	137C	NA	LIFE V	125C 100X	38/ 0	
	JK	16	N.R.	/74	NA	RINGCNT		3.80E 04	
19097	FLIPFLOP	C-1	KVRDIP 14	137C	NA	LIFE V	125C 100X	210/ 0	
	JK	6	N.R.	/74	NA	RINGCNT		2.10E 05	
19097	FLIPFLOP	C-2	KVRDIP 14	137C	NA	LIFE V	125C	105/ 0	
	JK	6	N.R.	/75	NA	RINGCNT		1.05E 05	
19097	FLIPFLOP	NONE	KVRDIP 14	150C	NA	LIFE V	150C	75/ 0	
	JK	6	N.R.	/75	NA	STGLIFE		7.50E 04	
19097	FLIPFLOP	NONE	KVRDIP 14	137C	NA	LIFE V	125C	52/ 0	
	JK	6	N.R.	/75	NA	RINGCNT		5.20E 04	
19097	FLIPFLOP	D.O.	KVRDIP 14	150C	NA	LIFE V	150C	11/ 0	
	JK	6	N.R.	/75	NA	STGLIFE		1.10E 04	
19099	FLIPFLOP	B-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	JK	6	N.R.	/75	NA	STGLIFE		2.20E 04	
19099	FLIPFLOP	B-2	KVRDIP 14	135C	NA	LIFE V	125C	55/ 0	
	JK	6	N.R.	/75	NA	RINGCNT		5.50E 04	
19099	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE U	150C	75/ 0	
	JK	6	N.R.	/74	NA	STGLIFE		7.50E 04	
19099	FLIPFLOP	C-1	KVRDIP 14	135C	NA	LIFE U	125C	105/ 0	
	JK	6	N.R.	/74	NA	RINGCNT		1.05E 05	
19099	FLIPFLOP	NONE	KVRDIP 14	135C	NA	LIFE V	125C 100X	105/ 1	
	JK	6	N.R.	72/74	NA	RINGCNT		1.05E 05	
19099	FLIPFLOP	NONE	RADIP 14	85C	NA	LIFE U	085C 85ERN	25/ 1	
	JK	16	N.R.	72/75	NA	RNRB		2.50E 04	
1930	GATE	A-2	KVRFPK 14	150C	NA	LIFE V	150C	38/ 0	
	N.R.	2	N.R.	/75	NA	STGLIFE		3.80E 04	
1930	GATE	B-2	SNCAN 10	160C	NA	LIFE V	150C	52/ 0	
	EXPANDABLE	2	N.R.	/75	NA	STGLIFE		5.20E 04	
1930	GATE	B-2	SNCAN 10	135C	NA	LIFE V	125C	105/ 0	
	EXPANDABLE	2	N.R.	/75	NA	RINGCNT		1.05E 05	
1930	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	N.R.	2	N.R.	/75	NA	STGLIFE		2.20E 04	
1930	GATE	B-2	KVRDIP 14	127C	NA	LIFE V	125C	20/ 0	
	N.R.	2	N.R.	/75	NA	RINGCNT		2.00E 04	

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
930	GATE	C-1	KVRFPK 14	150C	NA	LIFE V	150C	261/ 0			
	N.R.	2	N.R.	/74	NA	STGLIFE		5.15E 05			
930	GATE	C-1	KVRFPK 14	127C	NA	LIFE V	125C 100X	385/ 0			
	N.R.	2	N.R.	/74	NA	RINGCNT		6.71E 05			
930	GATE	C-1	KVRDIP 14	150C	NA	LIFE U	150C	150/ 0			
	N.R.	2	N.R.	/74	NA	STGLIFE		1.50E 05			
930	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	231/ 2	2/DEGRADED		
	N.R.	2	N.R.	/74	NA	STGLIFE		2.31E 05			
930	GATE	C-1	KVRDIP 14	127C	NA	LIFE U	125C	210/ 0			
	N.R.	2	N.R.	/74	NA	RINGCNT		2.10E 05			
930	GATE	C-1	KVRDIP 14	127C	NA	LIFE V	125C 100X	488/ 0			
	N.R.	2	N.R.	/74	NA	RINGCNT		4.88E 05			
930	GATE	NONE	KVRFPK 14	160C	NA	LIFE V	150C	107/ 0			
	EXPANDABLE	2	N.R.	/75	NA	STGLIFE		1.07E 05			
930	GATE	NONE	KVRFPK 14	135C	NA	LIFE V	125C	134/ 1			
	EXPANDABLE	2	N.R.	/75	NA	RINGCNT		1.34E 05			
930	GATE	NONE	KVRDIP 14	135C	NA	LIFE V	125C	311/ 0			
	EXPANDABLE	2	N.R.	/75	NA	RINGCNT		2.84E 05			
930	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	71/ 0			
	N.R.	2	N.R.	/75	NA	STGLIFE		7.10E 04			
930	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C 85XRXH	107/ 1			
	N.R.	2	N.R.	/75	NA	HUMLIFE		1.07E 05			
930	GATE	NONE	EADIP 14	127C	NA	LIFE V	125C	174/ 1			
	N.R.	2	N.R.	/75	NA	EM		1.74E 05			
932	BUFFER	B-2	SNCAN 10	160C	NA	LIFE V	150C	38/ 0			
	EXPANDABLE	2	N.R.	/75	NA	STGLIFE		3.80E 04			
932	BUFFER	B-2	SNCAN 10	135C	NA	LIFE V	125C	38/ 0			
	EXPANDABLE	2	N.R.	/75	NA	RINGCNT		3.80E 04			
932	BUFFER	C-1	KVRFPK 14	150C	NA	LIFE V	150C	211/ 0			
	EXPANDABLE	2	N.R.	/74	NA	STGLIFE		3.77E 05			
932	BUFFER	C-1	KVRFPK 14	131C	NA	LIFE V	125C 100X	222/ 1	1/DEGRADED		
	EXPANDABLE	2	N.R.	/74	NA	RINGCNT		3.20E 05			
932	BUFFER	C-1	KVRDIP 14	150C	NA	LIFE U	150C	150/ 0			
	EXPANDABLE	2	N.R.	/74	NA	STGLIFE		1.50E 05			
932	BUFFER	C-1	KVRDIP 14	150C	NA	LIFE V	150C	298/ 0			
	EXPANDABLE	2	N.R.	/74	NA	STGLIFE		2.98E 05			
932	BUFFER	C-1	KVRDIP 14	131C	NA	LIFE U	125C	210/ 0			
	EXPANDABLE	2	N.R.	/74	NA	RINGCNT		2.10E 05			

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1932	BUFFER EXPANDABLE	C-1 2	KVRDIP 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100%	626/ 1 6.26E 05	1/DEGRADED	
1932	BUFFER EXPANDABLE	NONE 2	KVRFPK 14 N.R.	160C /75	NA NA	LIFE V STGLIFE	150C	165/ 3.05E 05		
1932	BUFFER EXPANDABLE	NONE 2	KVRFPK 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	176/ 1.92E 05		
1932	BUFFER EXPANDABLE	NONE 2	KVRDIP 14 N.R.	160C /75	NA NA	LIFE V STGLIFE	150C	25/ 2.50E 04		
1932	BUFFER EXPANDABLE	NONE 2	KVRDIP 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	38/ 3.80E 04		
1932	BUFFER EXPANDABLE	NONE 2	EADIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	68/ 6.80E 04		
1932	BUFFER EXPANDABLE	NONE 2	EADIP 14 N.R.	85C /75	NA NA	LIFE V HUMLIFE	085C 85%RH	156/ 1.56E 05		
1932	BUFFER EXPANDABLE	NONE 2	EADIP 14 N.R.	70C 72/75	NA NA	LIFE U REVBias	070C	25/ 2.50E 04		
1932	BUFFER EXPANDABLE	NONE 2	EADIP 14 N.R.	125C 72/75	NA NA	LIFE U REVBias	125C	25/ 1.88E 04		
1932	BUFFER EXPANDABLE	NONE 2	EADIP 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100%	105/ 1.05E 05		
1933	EXPANDER N.R.	B-1 2	KVRFPK 14 N.R.	160C /74	NA NA	LIFE V STGLIFE	150C	40/ 4.00E 04		
1933	EXPANDER N.R.	B-1 2	KVRFPK 14 N.R.	135C /74	NA NA	LIFE V RINGCNT	125C 100%	76/ 7.60E 04		
1933	EXPANDER N.R.	C-1 2	KVRFPK 14 N.R.	160C /74	NA NA	LIFE V STGLIFE	150C	38/ 1.39E 05		
1933	EXPANDER N.R.	C-1 2	KVRFPK 14 N.R.	135C /74	NA NA	LIFE V RINGCNT	125C 100%	32/ 3.20E 04		
1933	EXPANDER N.R.	C-1 2	KVRDIP 14 N.R.	160C /74	NA NA	LIFE V STGLIFE	150C	180/ 1.80E 05		
1933	EXPANDER N.R.	C-1 2	KVRDIP 14 N.R.	135C /74	NA NA	LIFE V RINGCNT	125C 100%	210/ 2.10E 05		
1933	EXPANDER N.R.	C-2 2	KVRFPK 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	63/ 6.30E 04		
1933	EXPANDER N.R.	C-2 2	KVRDIP 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	105/ 1.05E 05		
1933	EXPANDER N.R.	NONE 2	KVRDIP 14 N.R.	160C /75	NA NA	LIFE V STGLIFE	150C	104/ 6.60E 04		

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCHEM. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1933	EXPANDER N.R.	NONE 2	KVRDIP 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	48/ 0 6.10E 04		
1933	EXPANDER N.R.	NONE 2	EADIP 14 N.R.	160C /74	NA NA	LIFE V STGLIFE	150C	46/ 0 4.60E 04		
1933	EXPANDER N.R.	NONE 2	EADIP 14 N.R.	95C /75	NA NA	LIFE V HUMLIFE	085C 85YR	52/ 1 5.20E 04		
1933	EXPANDER N.R.	NONE 2	EADIP 14 N.R.	135C 72/75	NA NA	LIFE U REVBAS	125C	25/ 0 1.88E 04		
1933	EXPANDER N.R.	NONE 2	EADIP 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	22/ 0 2.20E 04		
1935	INVERTER N.R.	A-2 6	KVRFPK 14 N.R.	160C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
1935	INVERTER N.R.	A-2 6	KVRFPK 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	38/ 0 3.80E 04		
1935	INVERTER N.R.	NONE 6	EADIP 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	22/ 0 2.20E 04		
1935	INVERTER N.R.	NONE 6	EADIP 14 N.R.	85C /75	NA NA	LIFE V HUMLIFE	085C 85YR	52/ 0 5.20E 04		
1935	INVERTER N.R.	NONE 6	EADIP 14 N.R.	132C /75	NA NA	LIFE V RINGCNT	125C	11/ 0 1.10E 04		
1936	INVERTER N.R.	B-1 6	KVRFPK 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100X	38/ 0 3.80E 04		
1936	INVERTER N.R.	B-2 6	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	20/ 0 2.00E 04		
				/75				52/ 1 5.20E 04		
1936	INVERTER N.R.	B-2 6	KVRFPK 14 N.R.	131C /75	NA NA	LIFE V RINGCNT	125C	23/ 0 2.30E 04		
1936	INVERTER N.R.	C-1 6	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	143/ 0 1.43E 05		
1936	INVERTER N.R.	C-1 6	KVRDIP 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100X	413/ 1 4.13E 05	1/DEGRADED	
1936	INVERTER N.R.	NONE 6	KVRFPK 14 N.R.	131C /75	NA NA	LIFE V RINGCNT	125C	22/ 1 2.20E 04		
1936	INVERTER N.R.	NONE 6	KVRDIP 14 N.R.	160C /75	NA NA	LIFE V STGLIFE	150C	152/ 0 1.52E 05		
1936	INVERTER N.R.	NONE 6	KVRDIP 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	182/ 0 1.82E 05		
1936	INVERTER N.R.	NONE 6	EADIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	184/ 1 1.84E 05		
1936	INVERTER N.R.	NONE 6	EADIP 14 N.R.	85C /75	NA NA	LIFE V HUMLIFE	085C 85YR	415/ 6 4.15E 05		
				/75				242/ 6 1.21E 05		
1937	INVERTER N.R.	C-1 6	KVRDIP 14 N.R.	150C /74	NA NA	LIFE U STGLIFE	150C	34/ 0 3.40E 04		

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
937	INVERTER	C-1	KVRDIP 14	134C	NA	LIFE U	125C	105/ 0		
	N.R.	6	N.R.	/74	NA	RINGCNT		1.05E 05		
937	INVERTER	C-2	KVRDIP 14	134C	NA	LIFE V	125C	105/ 1		
	N.R.	6	N.R.	/75	NA	RINGCNT		2.35E 05		
937	INVERTER	NONE	EADIP 14	150C	NA	LIFE V	150C	100/ 0		
	N.R.	6	N.R.	/75	NA	STGLIFE		1.00E 05		
937	INVERTER	NONE	EADIP 14	85C	NA	LIFE V	085C 85IRH	104/ 0		
	N.R.	6	N.R.	/75	NA	HUMLIFE		1.04E 05		
937	INVERTER	NONE	EADIP 14	134C	NA	LIFE V	125C	157/ 3		
	N.R.	6	N.R.	/75	NA	RINGCNT		1.57E 05		
941	FLIPFLOP	B-1	KVRDIP 14	160C	NA	LIFE V	150C	34/ 0		
	MONOSTABLE	1	N.R.	/74	NA	STGLIFE		3.40E 04		
941	FLIPFLOP	B-2	KVRDIP 14	135C	NA	LIFE V	125C	105/ 0		
	MONOSTABLE	1	N.R.	/75	NA	RINGCNT		1.05E 05		
941	FLIPFLOP	C-1	KVRDIP 14	135C	NA	LIFE U	125C	105/ 0		
	MONOSTABLE	1	N.R.	/74	NA	RINGCNT		1.05E 05		
944	GATE	B-1	KVRFPK 14	130C	NA	LIFE V	125C 100X	76/ 0		
	N.R.	2	N.R.	/74	NA	RINGCNT		7.60E 04		
944	GATE	B-2	KVRFPK 14	150C	NA	LIFE U	150C	40/ 0		
	N.R.	2	N.R.	/74	NA	STGLIFE		4.00E 04		
944	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0		
	N.R.	2	N.R.	/75	NA	STGLIFE		2.20E 04		
944	GATE	B-2	KVRDIP 14	130C	NA	LIFE V	125C	11/ 0		
	N.R.	2	N.R.	/75	NA	RINGCNT		1.10E 04		
944	GATE	C-1	KVRFPK 14	150C	NA	LIFE V	150C	327/ 1	1/DEGRADED	
	N.R.	2	N.R.	/74	NA	STGLIFE		4.55E 05		
944	GATE	C-1	KVRFPK 14	130C	NA	LIFE V	125C 100X	440/ 0		
	N.R.	2	N.R.	/74	NA	RINGCNT		4.40E 05		
944	GATE	C-1	KVRDIP 14	130C	NA	LIFE U	125C	154/ 0		
	N.R.	2	N.R.	/74	NA	RINGCNT		1.54E 05		
944	GATE	C-2	KVRDIP 14	150C	NA	LIFE V	150C	52/ 0		
	N.R.	2	N.R.	/75	NA	STGLIFE		5.20E 04		
944	GATE	NONE	KVRFPK 14	160C	NA	LIFE V	150C	85/ 0		
	EXPANDABLE	2	N.R.	/75	NA	STGLIFE		8.50E 04		
944	GATE	NONE	KVRFPK 14	135C	NA	LIFE V	125C	80/ 0		
	EXPANDABLE	2	N.R.	/75	NA	RINGCNT		8.00E 04		
944	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	34/ 0		
	N.R.	2	N.R.	/74	NA	STGLIFE		3.40E 04		

DIGITAL DEVICE DATA

RELIABILITY ANALYSIS CENTER

ITY DTL		MANUFACTURER OPERATIONAL TYPE															
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS								
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE						PART HOURS					
1944	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C 85IRH	59/ 0									
	N.R.	2	N.R.	/74	NA	MUMLIFE		5.90E 04									
1944	GATE	NONE	EADIP 14	130C	NA	LIFE V	125C	105/ 0									
	N.R.	2	N.R.	/75	NA	RINGCNT		1.05E 05									
1944	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	25/ 0									
	N.R.	2	N.R.	72/75	NA	RHRB		2.50E 04									
1945	FLIPFLOP	A-1	KVRFPK 14	30C	COMB/MOC	FIELD U	025C	/ 0									
	N.R.	8	N.R.	70/74	SV	M.A.		6.78E 05									
1945	FLIPFLOP	B-2	KVRDIP 14	150C	NA	LIFE V	150C	48/ 0									
	N.R.	8	N.R.	/75	NA	STGLIFE		4.80E 04									
1945	FLIPFLOP	B-2	KVRDIP 14	130C	NA	LIFE V	125C	105/ 1									
	N.R.	8	N.R.	/75	NA	RINGCNT		1.05E 05									
1945	FLIPFLOP	B-2	SNCAN 10	150C	NA	LIFE V	150C	11/ 0									
	N.R.	11	N.R.	/75	NA	STGLIFE		1.10E 04									
1945	FLIPFLOP	B-2	SNCAN 10	135C	NA	LIFE V	125C	11/ 0									
	N.R.	11	N.R.	/75	NA	RINGCNT		1.10E 04									
1945	FLIPFLOP	C-1	KVRFPK 14	150C	NA	LIFE U	150C	45/ 0									
	N.R.	8	N.R.	/74	NA	STGLIFE		4.50E 04									
1945	FLIPFLOP	C-1	KVRFPK 14	130C	NA	LIFE U	125C	316/ 0									
	N.R.	8	N.R.	/74	NA	RINGCNT		3.16E 05									
1945	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE U	150C	300/ 0									
	N.R.	8	N.R.	/74	NA	STGLIFE		3.00E 05									
1945	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE V	150C	114/ 0									
	N.R.	8	N.R.	/74	NA	STGLIFE		1.14E 05									
1945	FLIPFLOP	C-1	KVRDIP 14	130C	NA	LIFE U	125C	525/ 1									
	N.R.	8	N.R.	/74	NA	RINGCNT		5.25E 05									
1945	FLIPFLOP	C-1	KVRDIP 14	130C	NA	LIFE V	125C 100X	269/ 0									
	N.R.	8	N.R.	/74	NA	RINGCNT		2.69E 05									
1945	FLIPFLOP	C-2	KVRDIP 14	150C	NA	LIFE V	150C	52/ 0									
	N.R.	8	N.R.	/75	NA	STGLIFE		5.20E 04									
1945	FLIPFLOP	NONE	KVRFPK 14	130C	NA	LIFE V	125C 100X	77/ 0									
	N.R.	8	N.R.	69/74	NA	RINGCNT		7.70E 04									
1945	FLIPFLOP	NONE	KVRDIP 14	150C	NA	LIFE V	150C	25/ 0									
	N.R.	11	N.R.	/75	NA	STGLIFE		2.50E 04									
1945	FLIPFLOP	NONE	KVRDIP 14	130C	NA	LIFE V	125C	77/ 0									
	N.R.	11	N.R.	/75	NA	RM		3.21E 05									
1945	FLIPFLOP	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	25/ 0									
	N.R.	11	N.R.	72/75	NA	RHRB		2.50E 04									

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
946	GATE	A-1	KVRFPK 14	29C	COMB/NOG	FIELD U	025C	/ 0		
	N.R.	4	N.R.	70/74	SF	N.A.		4.99E 05		
946	GATE	B-1	KVRFPK 14	150C	NA	LIFE V	150C	40/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		4.00E 04		
946	GATE	B-1	KVRFPK 14	129C	NA	LIFE V	125C 100%	76/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT		7.60E 04		
946	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	52/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		5.20E 04		
946	GATE	C-1	KVRFPK 14	150C	NA	LIFE V	150C	62/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		1.41E 05		
946	GATE	C-1	KVRFPK 14	129C	NA	LIFE V	125C 100%	198/ 1	1/DEGRADED	
	N.R.	4	N.R.	/74	NA	RINGCNT		1.82E 05		
946	GATE	C-1	KVRDIP 14	150C	NA	LIFE U	150C	782/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		7.82E 05		
946	GATE	C-1	KVRDIP 14	129C	NA	LIFE U	125C	210/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT		2.10E 05		
				/74				393/ 1	1/DEGRADED	
								3.93E 05		
946	GATE	C-2	KVRDIP 14	129C	NA	LIFE V	125C	12/ 1		
	N.R.	4	N.R.	/75	NA	RINGCNT		1.27E 05		
946	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	133/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		1.33E 05		
946	GATE	NONE	KVRDIP 14	129C	NA	LIFE V	125C 100%	398/ 1		
	N.R.	4	N.R.	/74	NA	RINGCNT		3.98E 05		
946	GATE	NONE	KVRDIP 14	129C	NA	LIFE V	125C	398/ 1		
	N.R.	4	N.R.	/75	NA	RINGCNT		3.98E 05		
946	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C 85ZRH	52/ 0		
	N.R.	4	N.R.	73/74	NA	HUMLIFE		5.20E 04		
948	FLIPFLOP	B-1	KVRFPK 14	150C	NA	LIFE V	150C	40/ 0		
	N.R.	8	N.R.	/74	NA	STGLIFE		4.00E 04		
948	FLIPFLOP	B-1	KVRFPK 14	130C	NA	LIFE V	125C 100%	76/ 0		
	N.R.	8	N.R.	/74	NA	RINGCNT		7.60E 04		
948	FLIPFLOP	C-1	KVRFPK 14	150C	NA	LIFE V	150C	183/ 0		
	N.R.	8	N.R.	/74	NA	STGLIFE		1.83E 05		
948	FLIPFLOP	C-1	KVRFPK 14	130C	NA	LIFE V	125C 100%	610/ 0		
	N.R.	8	N.R.	/74	NA	RINGCNT		3.94E 05		
948	FLIPFLOP	NONE	KVRFPK 14	150C	NA	LIFE V	150C	38/ 0		
	JK	8	N.R.	/75	NA	STGLIFE		3.80E 04		
948	FLIPFLOP	NONE	KVRFPK 14	135C	NA	LIFE V	125C	52/ 0		
	JK	8	N.R.	/75	NA	EM		5.20E 04		
949	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	11/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		1.10E 04		
949	GATE	B-2	KVRDIP 14	131C	NA	LIFE V	125C	11/ 0		
	N.R.	4	N.R.	/75	NA	RINGCNT		1.10E 04		

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
949	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	93/ 1	
	N.R.	4	N.R.	/75	NA	STGLIFE		1.10E 05	
949	GATE	NONE	KVRDIP 14	131C	NA	LIFE V	125C	105/ 0	
	N.R.	4	N.R.	/75	NA	RINGCNT		1.05E 05	
950	FLIPFLOP	A-1	KVRFPK 14	28C	COMB/NOC	FIELD U	025C	/ 0	
	RS	2	N.R.	70/74	SF	N.A.		3.57E 04	
951	FLIPFLOP	A-1	KVRFPK 14	29C	COMB/NOC	FIELD U	025C	/ 0	
	MONOSTABLE	1	N.R.	70/74	SF	N.A.		3.57E 05	
951	FLIPFLOP	B-1	KVRFPK 14	150C	NA	LIFE V	150C	20/ 0	
	MONOSTABLE	1	N.R.	/74	NA	STGLIFE		4.00E 04	
951	FLIPFLOP	B-1	KVRFPK 14	129C	NA	LIFE V	125C	38/ 0	
	MONOSTABLE	1	N.R.	/74	NA	RINGCNT		3.80E 04	
951	FLIPFLOP	C-1	KVRDIP 14	160C	NA	LIFE V	150C	45/ 0	
	MONOSTABLE	1	N.R.	/74	NA	STGLIFE		4.50E 04	
951	FLIPFLOP	C-1	KVRDIP 14	135C	NA	LIFE V	125C	160/ 0	
	MONOSTABLE	1	N.R.	/74	NA	RINGCNT		1.60E 05	
961	GATE	C-1	KVRFPK 14	150C	NA	LIFE V	150C	45/ 0	
	N.R.	2	N.R.	/74	NA	STGLIFE		4.50E 04	
961	GATE	C-1	KVRFPK 14	128C	NA	LIFE U	125C	77/ 0	
	N.R.	2	N.R.	/74	NA	RINGCNT		7.70E 04	
961	GATE	C-1	KVRDIP 14	150C	NA	LIFE U	150C	181/ 0	
	N.R.	2	N.R.	/74	NA	STGLIFE		1.81E 05	
961	GATE	C-1	KVRDIP 14	128C	NA	LIFE U	125C	284/ 0	
	N.R.	2	N.R.	/74	NA	RINGCNT		2.84E 05	
961	GATE	C-2	KVRDIP 14	128C	NA	LIFE V	125C	21/ 1	
	N.R.	2	N.R.	/75	NA	RINGCNT		2.10E 04	
962	GATE	A-1	KVRFPK 14	28C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	70/74	SF	N.A.		1.78E 05	
962	GATE	B-1	KVRFPK 14	150C	NA	LIFE V	150C	20/ 0	
	N.R.	3	N.R.	/74	NA	STGLIFE		2.00E 04	
962	GATE	B-1	KVRFPK 14	128C	NA	LIFE V	125C	38/ 0	
	N.R.	3	N.R.	/74	NA	RINGCNT		3.80E 04	
962	GATE	B-2	KVRDIP 14	128C	NA	LIFE V	125C	11/ 0	
	N.R.	3	N.R.	/75	NA	RINGCNT		1.10E 04	
962	GATE	C-1	KVRFPK 14	150C	NA	LIFE U	150C	24/ 0	
	N.R.	3	N.R.	/74	NA	STGLIFE		8.60E 04	
962	GATE	C-1	KVRFPK 14	128C	NA	LIFE V	125C	88/ 0	
	N.R.	3	N.R.	/74	NA	RINGCNT		8.80E 04	

DIGITAL DEVICE DATA

ITT DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1962	GATE	C-1	KVRDIP 14	150C	NA	LIFE U	150C	369/ 0		
	N.R.	3	N.R.	/74	NA	STGLIFE		4.37E 05		
1962	GATE	C-1	KVRDIP 14	128C	NA	LIFE U	125C	1009/ 1	1/DEGRADED	
	N.R.	3	N.R.	/74	NA	RINGCNT		1.08E 06		
1962	GATE	C-2	KVRDIP 14	128C	NA	LIFE V	125C	103/ 1		
	N.R.	3	N.R.	/75	NA	RINGCNT		1.03E 05		
1962	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	75/ 1		
	N.R.	3	N.R.	/74	NA	STGLIFE		7.50E 04		
1962	GATE	NONE	KVRDIP 14	128C	NA	LIFE V	125C 100X	182/ 0		
	N.R.	3	N.R.	/74	NA	RINGCNT		1.82E 05		
1962	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	75/ 1		
	N.R.	3	N.R.	/74	NA	STGLIFE		7.50E 04		
1962	GATE	NONE	EADIP 14	125C	NA	LIFE U	125C	25/ 1		
	N.R.	3	N.R.	72/75	NA	REVBIA		2.50E 04		
				72/75				25/ 10		
								6.25E 03		
1962	GATE	NONE	EADIP 14	128C	NA	LIFE V	125C 100X	105/ 0		
	N.R.	3	N.R.	/74	NA	RINGCNT		1.05E 05		
1963	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	75/ 0		
	N.R.	3	N.R.	/75	NA	STGLIFE		7.50E 04		
1963	GATE	NONE	KVRDIP 14	128C	NA	LIFE V	125C	105/ 1		
	N.R.	3	N.R.	/75	NA	RINGCNT		1.05E 05		

DIGITAL DEVICE DATA

MOTOROLA DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	BURN. CLASS	PACKAGE/ FIRM	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
1812	GATE N.R.	NONE 4	RADIP 14 INORGANIC	52C 73/77	DISPLAY GBC	FIELD U N.A.	040C 53EPMR	/ 0 2.19E 06			
668	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	136C 73/73	NA NA	LIFE V RINGCNT	123C	130/ 0 3.38E 06			
668	GATE N.R.	NONE 4	RADIP 14 INORGANIC	136C 73/73	NA NA	LIFE V RINGCNT	123C	75/ 0 7.74E 03			
671	GATE N.R.	NONE 3	KVRDIP 14 INORGANIC	134C 71/73	NA NA	LIFE V RINGCNT	123C	109/ 2 3.57E 06	1/OXIDE 1/CATASTROPHIC		
671	GATE N.R.	NONE 3	RADIP 14 INORGANIC	135C 73/73	NA NA	LIFE V RINGCNT	123C	41/ 0 6.08E 03			
672	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	136C 73/73	NA NA	LIFE V RINGCNT	123C	150/ 0 2.91E 06			
672	GATE N.R.	NONE 4	RADIP 14 INORGANIC	136C 73/73	NA NA	LIFE V RINGCNT	123C	75/ 0 7.74E 03			
830	GATE N.R.	NONE 2	PNDIP 14 INORGANIC	27C 68/73	NA NA	LIFE V RINGCNT	023C	485/ 0 3.07E 07			
832	BUFFER EXPANDABLE	NONE 2	PNDIP 14 INORGANIC	30C 67/73	NA NA	LIFE V RINGCNT	023C	150/ 0 1.04E 07			
844	GATE N.R.	NONE 2	PNDIP 14 INORGANIC	29C 67/73	NA NA	LIFE V RINGCNT	023C	133/ 0 9.37E 06			
848	GATE N.R.	NONE 4	RADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HMLIFE	083C 83EPMR	30/ 0 3.00E 04			
						FNCT RM	023C	30/ 0 0.			
858	GATE N.R.	NONE 4	RADIP 14 INORGANIC	70C 72/73	NA NA	LIFE U REVBAS	070C	23/ 1 2.30E 04			
932	BUFFER N.R.	A-1 2	KVRFFK 14 INORGANIC	33C 73/74	CONR/NOG SF	FIELD U N.A.	023C	/ 0 4.08E 04			
943	FLIPFLOP N.R.	A-1 3	KVRFFK 14 INORGANIC	34C 73/74	CONR/NOG SF	FIELD U N.A.	023C	/ 0 1.33E 03			
949	INVERTER N.R.	A-1 4	KVRFFK 14 INORGANIC	33C 73/74	CONR/NOG SF	FIELD U N.A.	023C	/ 0 9.18E 04			
950	FLIPFLOP N.R.	B-1 8	KVRFFK 14 INORGANIC	80C 74/74	ADAR AIU	REL Q TCVPC	-034C 071C 177CY2.2G39X	/ 0 2.33E 03			
950	FLIPFLOP N.R.	B-1 8	KVRFFK 14 INORGANIC	80C 74/74	ADAR AIU	REL Q TCVPC	-034C 071C 208CY2.2G39X	/ 0 2.97E 03			
951	FLIPFLOP MONOSTABLE	A-1 1	KVRFFK 14 INORGANIC	30C 73/74	CONR/NOG SF	FIELD U N.A.	023C	/ 0 3.06E 04			
958	GATE N.R.	B-1 4	KVRFFK 14 INORGANIC	93C 74/74	ADAR AIU	REL Q TCVPC	-034C 071C 177CY2.2G39X	/ 0 3.89E 03			
958	GATE N.R.	B-1 4	KVRFFK 14 INORGANIC	93C 74/74	ADAR AIU	REL Q TCVPC	-034C 071C 208CY2.2G39X	/ 0 6.93E 03			
961	GATE EXPANDABLE	A-1 8	KVRFFK 14 INORGANIC	30C 73/74	CONR/NOG SF	FIELD U N.A.	023C	/ 0 2.04E 04			
962	GATE N.R.	A-1 3	KVRFFK 14 INORGANIC	29C 73/74	CONR/NOG SF	FIELD U N.A.	023C	/ 0 7.14E 04			

DIGITAL DEVICE DATA

NATIONAL DTL		:MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCRN. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:
: 9099	: FLIPFLOP	: NONE	: EADIP 14	: 80C	: NA	: LIFE U	: 070C	: 25/ 0	:
:	: JK	: 16	: N.R.	: 72/75	: NA	: REVBias	:	: 2.50E 04	:
: 932	: BUFFER	: NONE	: EADIP 14	: 80C	: NA	: LIFE U	: 070C	: 25/ 0	:
:	: N.R.	: 2	: N.R.	: 72/75	: NA	: REVBias	:	: 2.50E 04	:
: 946	: GATE	: NONE	: EADIP 14	: 85C	: NA	: LIFE U	: 085C 85ZRH	: 50/ 0	:
:	: N.R.	: 4	: INORGANIC	: 77/77	: NA	: HUMLIFE	:	: 5.00E 04	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	: FNCT EM	: 025C	: 50/ 0	:
:	:	:	:	:	:	:	:	: 0.	:
: 946	: GATE	: NONE	: EADIP 14	: 85C	: NA	: LIFE U	: 085C 85ZRH	: 50/ 0	:
:	: N.R.	: 4	: INORGANIC	: 77/77	: NA	: HUMLIFE	:	: 5.00E 04	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	: FNCT EM	: 025C	: 50/ 0	:
:	:	:	:	:	:	:	:	: 0.	:

RAYTHEON DTL		MANUFACTURER : OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCR.N. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS
:	:	: NO.	: CHIP	: TEST	: APPL.	: TEST	:	: PART	:
:	:	: GATES	: PROTECT.	: DATE	: ENV.	: TYPE	:	: HOURS	:
: 213	: COUNTER	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: BINARY	: 1	: INORGANIC	: 73/74	: SF	: N.A.	:	: 3.06E 05	:
: 216	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: N.R.	: 3	: INORGANIC	: 73/74	: SF	: N.A.	:	: 6.32E 05	:
: 225	: FLIPFLOP	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: JK	: 3	: INORGANIC	: 73/74	: SF	: N.A.	:	: 4.08E 05	:
: 231	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: EXPANDABLE	: 2	: INORGANIC	: 73/74	: SF	: N.A.	:	: 1.08E 06	:
: 236	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: N.R.	: 3	: INORGANIC	: 73/74	: SF	: N.A.	:	: 4.28E 05	:
: 246	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: N.R.	: 4	: INORGANIC	: 73/74	: SF	: N.A.	:	: 6.93E 05	:
: 261	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: EXPANDABLE	: 2	: INORGANIC	: 73/74	: SF	: N.A.	:	: 1.09E 06	:
: 266	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: N.R.	: 4	: INORGANIC	: 73/74	: SF	: N.A.	:	: 5.30E 05	:
: 286	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: N.R.	: 6	: INORGANIC	: 73/74	: SF	: N.A.	:	: 9.38E 05	:
: 296	: GATE	: A-1	: SNFPK 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: N.R.	: 6	: INORGANIC	: 73/74	: SF	: N.A.	:	: 5.40E 05	:

DIGITAL DEVICE DATA

SIGNETICS DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
106	EXPANDER	A-1	SNFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	70/74	SF	N.A.		1.05E 06	
161	FLIPFLOP MONOSTABLE	A-1	SNFFK 14	40C	COMB/NOC	FIELD U	025C	/ 0	
		8	N.R.	70/74	SF	N.A.		6.14E 05	
380	GATE	NONE	SWIP 14	29C	DIG PROC	FIELD G	025C	/ 0	
	N.R.	4	INORGANIC	73/75	GBC	N.A.		1.91E 05	
731	EXPANDER	A-1	SNFFK 14	25C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	70/74	SF	N.A.		8.58E 05	
8424	FLIPFLOP RS	A-1	SNFFK 14	30C	COMB/NOC	FIELD U	025C	/ 0	
		16	N.R.	72/74	SF	N.A.		7.78E 04	
8424	FLIPFLOP RS	B-1	AUDIP 14		NAVIGATE	FIELD Q		/ 0	
		16	INORGANIC	72/74	AI	N.A.		1.29E 03	
8480	GATE	A-1	SNFFK 14	27C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	72/74	SF	N.A.		4.67E 04	

SPRAGUE DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5141B	GATE	A-1	NIFPK 10	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	70/74	SF	N.A.		3.57E 04	
5161	GATE	A-1	NIFPK 10	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	70/74	SF	N.A.		2.49E 05	
5162	GATE	A-1	NIFPK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	70/74	SF	N.A.		4.28E 05	
5171	GATE	A-1	NIFPK 10	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	70/74	SF	N.A.		7.14E 04	
5191	GATE	A-1	NIFPK 10	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.		N.R.	70/74	SF	N.A.		2.49E 05	

DIGITAL DEVICE DATA

T.I. DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
15846	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	50/ 0		
	N.R.	4	INORGANIC	77/77	NA	HUNLIFE		3.00E 04		
						FNCT EM	025C	50/ 0		
								0.		
15933	EXPANDER	A-1	KVRFPK 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	70/74	SF	N.A.		1.42E 06		
15944	GATE	A-1	KVRFPK 14	27C	COMB/NOC	FIELD U	025C	/ 0		
	EXPANDABLE	2	INORGANIC	70/74	SF	N.A.		1.42E 03		
15945	FLIPFLOP	A-1	SNFPK 14	28C	COMB/NOC	FIELD U	025C	/ 0		
	JK	3	INORGANIC	70/74	SF	N.A.		2.78E 06		
15946	GATE	A-1	KVRFPK 14	28C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	4	INORGANIC	70/74	SF	N.A.		1.57E 06		
15962	GATE	A-1	KVRFPK 14	27C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	3	INORGANIC	70/74	SF	N.A.		4.64E 03		
5300	FLIPFLOP	A-1	SNFPK 10	35C	COMB/NOC	FIELD U	025C	/ 0		
	JK	4	INORGANIC	70/74	SF	N.A.		2.14E 05		
846	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	50/ 0		
	N.R.	4	INORGANIC	77/77	NA	HUNLIFE		3.00E 04		
						FNCT EM	025C	50/ 3		
								0.		
846	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	50/ 2		
	N.R.	4	INORGANIC	77/77	NA	HUNLIFE		4.87E 04		
						FNCT EM	025C	48/ 0		
								0.		
846	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	50/ 0		
	N.R.	4	INORGANIC	77/77	NA	HUNLIFE		3.00E 04		
						FNCT EM	025C	50/ 0		
								0.		
846	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85IRH	50/ 1		
	N.R.	4	INORGANIC	77/77	NA	HUNLIFE		4.92E 04		
						FNCT EM	025C	49/ 1		
								0.		

DIGITAL DEVICE DATA

VARIOUS DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
323	GATE EXPANDABLE	B-1 4	FPK 16 N.R.			RADAR AIU	FIELD G N.A.	/ 0 1.84E 05		
323	GATE EXPANDABLE	C-1 4	FPK 16 N.R.			RADAR AIU	FIELD Q N.A.	/ 0 1.84E 04		
				72/74				/ 2 8.27E 04	2/CATASTROPHIC	
323	GATE EXPANDABLE	C-1 4	FPK 16 N.R.			RADAR AIU	FIELD G N.A.	/ 0 1.18E 05		
323	GATE EXPANDABLE	C-1 4	FPK 16 N.R.	81C 74/74		RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50Z	/ 0 3.51E 03	
9094	FLIPFLOP JK	N.R. 28	KVRFPK 14 N.R.			RADAR AI	FIELD Q N.A.	/ 0 9.03E 03		
9094	FLIPFLOP JK	N.R. 28	KVRFPK 14 N.R.	65C 74/75		RADAR AI	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88Z	/ 0 1.68E 04	
930	GATE EXPANDABLE	N.R. 2	KVRFPK 14 N.R.			RADAR AI	FIELD Q N.A.	/ 0 3.24E 03		
930	GATE EXPANDABLE	N.R. 2	KVRFPK 14 N.R.	65C 74/75		RADAR AI	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88Z	/ 0 8.40E 03	
930	GATE EXPANDABLE	N.R. 2	KVRFPK 14 N.R.			RADAR AU	FIELD Q N.A.	/ 0 2.82E 03		
930	GATE EXPANDABLE	X 2	NICAN 10 N.R.	65C 74/76		RADAR AU	CHECK Q TCVPC	-025C 055C 7CY 2.2G 66Z	/ 0 1.63E 05	
932	BUFFER EXPANDABLE	N.R. 2	KVRFPK 14 N.R.			RADAR AI	FIELD Q N.A.	/ 0 1.16E 04		
932	BUFFER EXPANDABLE	N.R. 2	KVRDIP 14 N.R.	65C 74/75		RADAR AI	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88Z	/ 0 1.12E 04	
932	BUFFER EXPANDABLE	X 2	NICAN 10 N.R.	65C 74/76		RADAR AU	CHECK Q TCVPC	-025C 055C 7CY 2.2G 66Z	/ 0 3.74E 04	
933	EXPANDER N.R.	X 2	NICAN 10 N.R.	65C 74/76		RADAR AU	CHECK Q TCVPC	-025C 055C 7CY 2.2G 66Z	/ 0 1.33E 04	
				74/76				/ 1 1.65E 04	1/DEGRADED	
937	INVERTER N.R.	N.R. 6	KVRFPK 14 N.R.			RADAR AI	FIELD Q N.A.	/ 0 2.56E 04		
937	INVERTER N.R.	N.R. 6	KVRFPK 14 N.R.	65C 74/75		RADAR AI	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88Z	/ 0 4.76E 04	
944	GATE EXPANDABLE	B-1 2	KVRFPK 14 N.R.	35C 73/75		DIG PROC AI	CHECK Q EQP OP	025C 1.67E 06		
944	GATE EXPANDABLE	B-1 2	KVRFPK 14 N.R.	64C 75/75		DIG PROC AI	REL Q TCVPC	-069C 054C 14CY .71G62Z	/ 0 1.02E 04	
944	GATE EXPANDABLE	B-1 2	KVRFPK 14 N.R.			DIG PROC AU	FIELD Q N.A.	/ 0 8.61E 03		
944	GATE EXPANDABLE	B-1 2	KVRFPK 14 N.R.			DIG PROC AU	FIELD G N.A.	/ 0 4.44E 04		
944	GATE EXPANDABLE	B-1 2	KVRFPK 14 N.R.	81C /74		DIG PROC AU	REL Q TCVPC	-054C 071C 178CY1.2G65Z	/ 0 8.56E 03	
944	GATE EXPANDABLE	B-1 2	SNFPK 14 N.R.			RADAR AIU	FIELD G N.A.	/ 0 1.05E 05		

DIGITAL DEVICE DATA

VARIOUS DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
944	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	EXPANDABLE	2	N.R.	75/76	AIU	N.A.		1.64E 04		
944	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	EXPANDABLE	2	N.R.	72/74	AIU	N.A.		1.15E 05		
944	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	EXPANDABLE	2	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50Z	4.86E 03		
944	GATE	C-1	SNFPK 14		RADAR	FIELD Q		/ 0		
	EXPANDABLE	2	N.R.	72/74	AIU	N.A.		1.89E 03		
944	GATE	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	EXPANDABLE	2	N.R.	75/78	AI	N.A.		3.65E 04		
944	GATE	N.R.	KVRFPK 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	EXPANDABLE	2	N.R.	74/75	AI	TCVPC	6CY 2.2G 88Z	1.32E 05		
944	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	2	N.R.	74/75	AI	TCVPC	6CY 2.2G 88Z	5.60E 03		
945	FLIPFLOP	X	NICAN 0	65C	RADAR	CHECK Q	-025C 055C	/ 0		
	RS	8	N.R.	74/76	AU	TCVPC	7CY 2.2G 66Z	2.67E 04		
946	GATE	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	75/78	AI	N.A.		1.03E 05		
946	GATE	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	75/78	AU	N.A.		3.72E 03		
946	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	6CY 2.2G 88Z	1.43E 05		
946	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	4	N.R.	74/75	AU	TCVPC	6CY 2.2G 88Z	1.12E 04		
948	FLIPFLOP	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	JK	3	N.R.	75/78	AI	N.A.		1.29E 04		
948	FLIPFLOP	N.R.	KVRFPK 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	JK	3	N.R.	74/75	AI	TCVPC	6CY 2.2G 88Z	8.40E 03		
951	FLIPFLOP	X	NICAN 10	65C	RADAR	CHECK Q	-025C 055C	/ 0		
	MONOSTABLE	6	N.R.	74/76	AU	TCVPC	7CY 2.2G 66Z	2.39E 04		
958	GATE	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	75/78	AI	N.A.		1.32E 04		
958	GATE	N.R.	KVRFPK 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	6CY 2.2G 88Z	1.96E 04		
962	GATE	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	3	N.R.	75/78	AI	N.A.		1.33E 04		
962	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	3	N.R.	74/75	AI	TCVPC	6CY 2.2G 88Z	1.96E 04		

DIGITAL DEVICE DATA

TESTING SOURCE DTI		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
213	FLIPFLOP RS	A-1 1	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.54E 06		
216	GATE N.R.	A-1 3	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.23E 06		
223	FLIPFLOP JK	A-1 3	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.04E 06		
231	GATE EXPANDABLE	A-1 2	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 5.42E 06		
236	GATE N.R.	A-1 3	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.23E 06		
246	GATE N.R.	A-1 4	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 3.47E 06		
266	GATE N.R.	A-1 4	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.67E 06		
286	GATE N.R.	A-1 6	AUFPK 14 N.R.	35C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 3.69E 06		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
100101	GATE	NONE	EADIP 24	135C	NA	LIFE V	125C	92/ 0		
	N.R.	3	INORGANIC	/77	NA	OP CNST		1.84E 05		
						EM		92/ 0		
								0.		
100101	GATE	NONE	EADIP 24	95C	NA	LIFE V	085C 85%	96/ 0		
	N.R.	3	INORGANIC	/77	NA	RHRB		1.92E 05		
						EM		96/ 0		
								0.		
100102	GATE	NONE	KVRFPK 24	135C	NA	LIFE V	125C	48/ 0		
	N.R.	6	INORGANIC	/77	NA	OP CNST		9.60E 04		
						EM		48/ 0		
								0.		
100102	GATE	NONE	EADIP 24	135C	NA	LIFE V	125C	96/ 0		
	N.R.	6	INORGANIC	/77	NA	OP CNST		1.92E 05		
						EM		96/ 0		
								0.		
100102	GATE	NONE	EADIP 24	135C	NA	LIFE V	125C	120/ 0		
	N.R.	6	INORGANIC	/77	NA	OP CNST		1.20E 05		
						EM		120/ 0		
								0.		
100102	GATE	NONE	EADIP 24	95C	NA	LIFE V	085C 85%	96/ 0		
	N.R.	6	INORGANIC	/77	NA	RHRB		1.92E 05		
						EM		96/ 0		
								0.		
100102	GATE	NONE	EADIP 24	95C	NA	LIFE V	085C 85%	96/ 0		
	N.R.	6	INORGANIC	/77	NA	RHRB		9.60E 04		
						EM		96/ 0		
								0.		
100107	GATE	NONE	KVRFPK 24	135C	NA	LIFE V	125C	10/ 0		
	N.R.	6	INORGANIC	/77	NA	OP CNST		2.00E 04		
						EM		10/ 0		
								0.		
100107	GATE	NONE	KVRFPK 24	135C	NA	LIFE V	125C	72/ 0		
	N.R.	6	INORGANIC	/77	NA	OP CNST		1.08E 05		
						EM		72/ 0		
								0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
100107	GATE N.R.	NONE 6	KVRFPK 24 INORGANIC	135C /77	NA NA	LIFE V OP CNST	125C	28/ 0 2.80E 04		
						EM		28/ 0 0.		
100118	GATE N.R.	NONE 6	KVRFPK 24 INORGANIC	135C /77	NA NA	LIFE V OP CNST	125C	76/ 0 1.52E 05		
						EM		76/ 0 0.		
100164	MULTIPLEXER N.R.	NONE	KVRFPK 24 INORGANIC	135C /77	NA NA	LIFE V OP CNST	125C	128/ 0 1.28E 05		
						EM		128/ 0 0.		
10016	COUNTER BINARY	NONE 59	EADIP 16 INORGANIC	150C /75	NA NA	LIFE V OP CNST	125C	45/ 0 9.00E 04		
						EM		45/ 0 0.		
10016	COUNTER BINARY	NONE 59	EADIP 16 INORGANIC	110C /75	NA NA	LIFE V RHRB	085C 85%	45/ 0 9.00E 04		
						EM		45/ 0 0.		
10101	GATE N.R.	NONE 4	KVRDIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	76/ 0 1.52E 05		
						EM		76/ 0 0.		
10101	GATE N.R.	NONE 4	KVRDIP 16 INORGANIC	135C /77	NA NA	LIFE V OP CNST	125C	54/ 0 1.08E 05		
						EM		54/ 0 0.		
10101	GATE N.R.	NONE 4	EADIP 16 INORGANIC	95C /77	NA NA	LIFE V RHRB	085C 85%	45/ 0 4.50E 04		
						EM		45/ 0 0.		
10101	GATE N.R.	NONE 4	EADIP 16 INORGANIC	95C /77	NA NA	LIFE V RHRB	085C 85%	45/ 0 4.50E 04		
						EM		45/ 1 0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10101	GATE	NONE	EADIP 16	95C	NA	LIFE V	085C 85%	50/ 0		
	N.R.	4	INORGANIC	/77	NA	RHRB		5.00E 04		
						EM		50/ 0		
								0.		
10101	GATE	NONE	EADIP 16	95C	NA	LIFE V	085C 85%	45/ 0		
	N.R.	4	INORGANIC	/77	NA	RHRB		4.50E 04		
						EM		45/ 0		
								0.		
10101	GATE	NONE	EADIP 16	95C	NA	LIFE V	085C 85%	45/ 0		
	N.R.	4	INORGANIC	/77	NA	RHRB		4.50E 04		
						EM		45/ 0		
								0.		
10101	GATE	NONE	EADIP 16	95C	NA	LIFE V	085C 85%	50/ 0		
	N.R.	4	INORGANIC	/77	NA	RHRB		5.00E 04		
						EM		50/ 0		
								0.		
10101	GATE	NONE	EADIP 16	95C	NA	LIFE V	085C 85%	40/ 0		
	N.R.	4	INORGANIC	/77	NA	RHRB		4.00E 04		
						EM		40/ 0		
								0.		
10102	GATE	NONE	KVRDIP 16	135C	NA	LIFE V	125C	77/ 0		
	N.R.	4	INORGANIC	/75	NA	OP CNST		1.54E 05		
						EM		77/ 0		
								0.		
10102	GATE	NONE	KVRDIP 16	135C	NA	LIFE V	125C	50/ 0		
	N.R.	4	INORGANIC	/77	NA	OP CNST		5.00E 04		
						EM		50/ 0		
								0.		
10106	GATE	NONE	KVRDIP 16	133C	NA	LIFE V	125C	90/ 0		
	N.R.	3	INORGANIC	/75	NA	OP CNST		1.80E 05		
						EM		90/ 0		
								0.		
10106	GATE	NONE	KVRDIP 16	133C	NA	LIFE V	125C	90/ 0		
	N.R.	3	INORGANIC	/75	NA	OP CNST		1.80E 05		
						EM		90/ 0		
								0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10109	GATE N.R.	NONE 2	KVRDIP 16 INORGANIC	130C /75	NA NA	LIFE V OP CNST	125C	54/ 0 8.10E 04		
						EM		54/ 0 0.		
10109	GATE N.R.	NONE 2	KVRDIP 16 INORGANIC	130C /75	NA NA	LIFE V OP CNST	125C	57/ 0 1.71E 05		
						EM		57/ 0 0.		
10117	GATE N.R.	NONE 8	EADIP 16 INORGANIC	95C /77	NA NA	LIFE V RHRB	085C 85X	50/ 0 5.00E 04		
						EM		50/ 0 0.		
10130	LATCH D	NONE 16	KVRDIP 16 INORGANIC	139C /75	NA NA	LIFE V OP CNST	125C	80/ 0 1.20E 05		
						EM		80/ 0 0.		
10131	FLIPFLOP D	NONE 14	KVRDIP 16 INORGANIC	149C /77	NA NA	LIFE V OP CNST	125C	50/ 0 1.00E 05		
						EM		50/ 0 0.		
10132	MULTIPLEXER LATCH	NONE	KVRDIP 16 INORGANIC	148C /75	NA NA	LIFE V OP CNST	125C	54/ 0 1.08E 05		
						EM		54/ 0 0.		
10133	LATCH N.R.	NONE	KVRDIP 16 INORGANIC	156C /75	NA NA	LIFE V OP CNST	125C	89/ 0 1.78E 05		
						EM		89/ 1 0.		
10133	LATCH N.R.	NONE	EADIP 16 INORGANIC	135C /77	NA NA	LIFE V OP CNST	125C	48/ 0 9.60E 04		
						EM		48/ 0 0.		
10133	LATCH N.R.	NONE	EADIP 16 INORGANIC	95C /77	NA NA	LIFE V RHRB	085C 85X	48/ 0 4.80E 04		
						EM		48/ 0 0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10133	LATCH N.R.	NONE	KADIP 16 INORGANIC	95C /77	NA NA	LIFE V RHRB	083C 85%	50/ 0 5.00E 04		
						EM		50/ 0 0.		
10141	SHIFT REG N.R.	NONE	KVRDIP 16 INORGANIC	165C /75	NA NA	LIFE V OP CNST	125C	83/ 0 1.66E 05		
						EM		83/ 0 0.		
10160	GENERATOR N.R.	NONE	KVRDIP 16 INORGANIC	149C /75	NA NA	LIFE V OP CNST	125C	54/ 0 5.40E 04		
						EM		54/ 0 0.		
10160	GENERATOR N.R.	NONE	KVRDIP 16 INORGANIC	149C /75	NA NA	LIFE V OP CNST	125C	95/ 0 1.90E 05		
						EM		95/ 0 0.		
10160	GENERATOR N.R.	NONE	KVRDIP 16 INORGANIC	149C /75	NA NA	LIFE V OP CNST	125C	288/ 0 2.88E 05		
						EM		288/ 0 0.		
10160	GENERATOR N.R.	NONE	KVRDIP 16 INORGANIC	149C /77	NA NA	LIFE V OP CNST	125C	40/ 0 8.00E 04		
						EM		40/ 0 0.		
10160	GENERATOR N.R.	NONE	KVRDIP 16 INORGANIC	149C /77	NA NA	LIFE V OP CNST	125C	49/ 0 4.90E 04		
						EM		49/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE	KVRDIP 16 INORGANIC	154C /75	NA NA	LIFE V OP CNST	125C	43/ 0 8.60E 04		
						EM		43/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE	KVRDIP 16 INORGANIC	154C /75	NA NA	LIFE V OP CNST	125C	162/ 0 3.24E 05		
						EM		162/ 0 0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.# TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10161	DECODE/DEMUX N.R.	NONE 12	KVRDIP 16 INORGANIC	154C /75	NA NA	LIFE V OP CNST	125C	54/ 0 1.08E 05		
						EM		54/ 1 0.		
10161	DECODE/DEMUX N.R.	NONE 12	KVRDIP 16 INORGANIC	154C /75	NA NA	LIFE V OP CNST	125C	89/ 0 1.78E 05		
						EM		89/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	52/ 0 1.56E 05		
						EM		52/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	54/ 0 1.08E 05		
						EM		54/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	264/ 0 2.64E 05		
						EM		264/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	52/ 0 1.56E 05		
						EM		52/ 1 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	50/ 0 1.00E 05		
						EM		50/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	135C /75	NA NA	LIFE V OP CNST	125C	50/ 0 7.50E 04		
						EM		50/ 0 0.		
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	95C /75	NA NA	LIFE V RHRB	085C 85%	50/ 0 1.00E 05		
						EM		50/ 0 0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	95C /75	NA NA	LIFE V RHRB	085C 85%	50/ 0 1.00E 05			
						EM		50/ 1 0.			
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	95C /75	NA NA	LIFE V RHRB	085C 85%	50/ 0 5.00E 04			
						EM		50/ 0 0.			
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	95C /75	NA NA	LIFE V RHRB	085C 85%	50/ 0 5.00E 04			
						EM		50/ 0 0.			
10161	DECODE/DEMUX N.R.	NONE 12	EADIP 16 INORGANIC	95C /75	NA NA	LIFE V RHRB	085C 85%	50/ 0 5.00E 04			
						EM		50/ 0 0.			
10165	ENCODER N.R.	NONE	KVRDIP 16 INORGANIC	177C /77	NA NA	LIFE V OP CNST	125C	47/ 0 4.70E 04			
						EM		47/ 0 0.			
10170	GENERATOR N.R.	NONE 5	KVRDIP 16 INORGANIC	153C /77	NA NA	LIFE V OP CNST	125C	56/ 0 1.12E 05			
						EM		56/ 1 0.			
10174	MULTIPLEXER N.R.	NONE	AUDIP 16 INORGANIC	142C /75	NA NA	LIFE V OP CNST	125C	162/ 0 4.86E 05			
						EM		162/ 0 0.			
10174	MULTIPLEXER N.R.	NONE	AUDIP 16 INORGANIC	217C /75	NA NA	LIFE V OP CNST	200C	30/ 0 6.00E 04			
						EM		30/ 0 0.			
10231	FLIPFLOP D	NONE 14	KVRDIP 16 INORGANIC	150C /77	NA NA	LIFE V OP CNST	125C	20/ 0 2.00E 04			
						EM		20/ 0 0.			

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
111C01	GATE	NONE	KVRFFK 16	140C	NA	LIFE V	125C	190/ 0		
	N.R.	2	INORGANIC	/75	NA	OP CNST		3.80E 05		
						EM		190/ 1		
								0.		
111C01	GATE	NONE	KVRFFK 16	140C	NA	LIFE V	125C	75/ 0		
	N.R.	2	INORGANIC	/75	NA	OP CNST		7.30E 04		
						EM		75/ 0		
								0.		
111C01	GATE	NONE	KVRFFK 16	140C	NA	LIFE V	125C	83/ 0		
	N.R.	2	INORGANIC	/75	NA	OP CNST		8.30E 04		
						EM		83/ 0		
								0.		
111C01	GATE	NONE	KVRFFK 16	140C	NA	LIFE V	125C	36/ 0		
	N.R.	2	INORGANIC	/77	NA	OP CNST		3.60E 04		
						EM		36/ 0		
								0.		
111C01	GATE	NONE	AUDIP 16	135C	NA	LIFE V	125C	96/ 0		
	N.R.	2	INORGANIC	/75	NA	OP CNST		4.80E 04		
						EM		96/ 0		
								0.		
111C06	FLIPFLOP	NONE	AUDIP 16	135C	NA	LIFE V	125C	78/ 0		
	D	7	INORGANIC	/77	NA	OP CNST		7.80E 04		
						EM		78/ 0		
								0.		
111C90	COUNTER	NONE	KVRDIP 16	135C	NA	LIFE V	125C	48/ 0		
	N.R.		INORGANIC	/77	NA	OP CNST		9.60E 04		
						EM		48/ 1		
								0.		
95106	GATE	NONE	KVRDIP 16	133C	NA	LIFE V	125C	54/ 0		
	N.R.	3	INORGANIC	/75	NA	OP CNST		1.08E 05		
						EM		54/ 0		
								0.		
95109	GATE	NONE	KVRDIP 16	130C	NA	LIFE V	125C	81/ 0		
	N.R.	2	INORGANIC	/75	NA	OP CNST		8.10E 04		
						EM		81/ 0		
								0.		

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
:95109	: GATE	: NONE	: KVRDIP 16	: 130C	: NA	: LIFE V	: 125C	: 54/ 0		
	: N.R.	: 2	: INORGANIC	: /75	: NA	: OP CNST		: 2.16E 05		
						: EM		: 54/ 0		
								: 0.		
:95H03	: GATE	: NONE	: KVRDIP 16	: 148C	: NA	: LIFE V	: 125C	: 24/ 0		
	: N.R.	: 3	: INORGANIC	: /75	: NA	: OP CNST		: 2.40E 04		
						: EM		: 24/ 1		
								: 0.		
:95H03	: GATE	: NONE	: KVRDIP 16	: 148C	: NA	: LIFE V	: 125C	: 54/ 0		
	: N.R.	: 3	: INORGANIC	: /75	: NA	: OP CNST		: 8.10E 04		
						: EM		: 54/ 0		
								: 0.		
:95H28	: FLIPFLOP	: NONE	: KVRDIP 16	: 158C	: NA	: LIFE V	: 125C	: 78/ 0		
	: D	: 14	: INORGANIC	: /75	: NA	: OP CNST		: 7.80E 04		
						: EM		: 78/ 0		
								: 0.		
:95H28	: FLIPFLOP	: NONE	: KVRDIP 16	: 233C	: NA	: LIFE V	: 200C	: 40/ 0		
	: D	: 14	: INORGANIC	: /75	: NA	: OP CNST		: 4.00E 04		
						: EM		: 40/ 0		
								: 0.		
:95H90	: COUNTER	: NONE	: KVRDIP 16	: 169C	: NA	: LIFE V	: 125C	: 76/ 0		
	: N.R.		: INORGANIC	: /75	: NA	: OP CNST		: 7.60E 04		
						: EM		: 76/ 0		
								: 0.		
:95H90	: COUNTER	: NONE	: KVRDIP 16	: 169C	: NA	: LIFE V	: 125C	: 23/ 0		
	: N.R.		: INORGANIC	: /75	: NA	: OP CNST		: 4.60E 04		
						: EM		: 23/ 0		
								: 0.		
:95H90	: COUNTER	: NONE	: KVRDIP 16	: 169C	: NA	: LIFE V	: 125C	: 48/ 0		
	: N.R.		: INORGANIC	: /75	: NA	: OP CNST		: 7.20E 04		
						: EM		: 48/ 0		
								: 0.		
:95H90	: COUNTER	: NONE	: KVRDIP 16	: 169C	: NA	: LIFE V	: 125C	: 45/ 0		
	: N.R.		: INORGANIC	: /77	: NA	: OP CNST		: 9.00E 04		
						: EM		: 45/ 0		
								: 0.		
:95H90	: COUNTER	: NONE	: KVRDIP 16	: 244C	: NA	: LIFE V	: 200C	: 88/ 0		
	: N.R.		: INORGANIC	: /75	: NA	: OP CNST		: 8.80E 04		
						: EM		: 88/ 0		
								: 0.		

DIGITAL DEVICE DATA

MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1001	GATE	NONE	PHDIP 14	35C	NA	LIFE U	025C	285/ 0		
	N.R.	1	INORGANIC	67/75	NA	RINGCNT		2.03E 07		
1004	GATE	NONE	PHDIP 14	35C	NA	LIFE V	025C	435/ 0		
	N.R.	2	INORGANIC	68/75	NA	RINGCNT		2.94E 07		
1007	GATE	NONE	PHDIP 14	35C	NA	LIFE V	025C	285/ 0		
	N.R.	3	INORGANIC	68/75	NA	RINGCNT		1.83E 07		
10101	GATE	NONE	KVRDIP 16	35C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		2.90E 06		
10102	GATE	NONE	KVRDIP 16	35C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		1.56E 05		
10104	GATE	NONE	KVRDIP 16	39C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		2.61E 05		
10105	GATE	NONE	KVRDIP 16	33C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	3	INORGANIC	73/75	GBC	N.A.		1.04E 05		
10107	GATE	NONE	KVRDIP 16	37C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	3	INORGANIC	73/75	GBC	N.A.		3.47E 04		
10109	GATE	NONE	KVRDIP 16	30C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		6.25E 05		
10110	GATE	NONE	KVRDIP 16	40C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		1.74E 04		
10111	GATE	NONE	KVRDIP 16	40C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		1.74E 04		
10131	FLIPFLOP	NONE	KVRDIP 16	48C	DIG PROC	FIELD G	025C	/ 0		
	D	14	INORGANIC	73/75	GBC	N.A.		3.13E 05		
10133	LATCH	NONE	KVRDIP 16	56C	DIG PROC	FIELD G	025C	/ 0		
	BISTABLE	30	INORGANIC	73/75	GBC	N.A.		6.95E 04		
10136	COUNTER	NONE	KVRDIP 16	88C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	55	INORGANIC	73/75	GBC	N.A.		2.61E 05		
10161	DECODER	NONE	KVRDIP 16	75C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	12	INORGANIC	73/75	GBC	N.A.		5.21E 04		
10162	DECODER	NONE	KVRDIP 16	75C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	12	INORGANIC	73/75	GBC	N.A.		3.47E 04		
10164	MULTIPLEXER	NONE	KVRDIP 16	56C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	12	INORGANIC	73/75	GBC	N.A.		6.08E 05		
10164	MULTIPLEXER	NONE	KVRDIP 16	71C	DISPLAY	FIELD U	040C 55XPWR	/ 8		
	N.R.	12	INORGANIC	75/77	GBC	N.A.		3.63E 06		
10173	MULTIPLEXER	NONE	KVRDIP 16	53C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	33	INORGANIC	73/75	GBC	N.A.		6.95E 04		

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MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10174	MULTIPLEXER	NONE	KVRDIP 0	58C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	12	INORGANIC	73/75	GBC	N.A.		3.82E 05		
10179	GENERATOR	NONE	KVRDIP 16	50C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	12	INORGANIC	73/75	GBC	N.A.		3.47E 04		
1201	GATE	NONE	KVRDIP 14	37C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	1	INORGANIC	73/75	GBC	N.A.		8.34E 05		
1204	GATE	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	75/76	GM	N.A.		1.73E 05		
1204	GATE	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0		
	N.R.	2	INORGANIC	75/76	GM	EQP OP		5.36E 04		
1204	GATE	NONE	KVRDIP 14	35C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		4.33E 06		
1206	GATE	NONE	KVRDIP 14	30C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		1.74E 04		
1207	GATE	NONE	KVRDIP 14	36C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	3	INORGANIC	73/75	GBC	N.A.		5.38E 05		
1209	GATE	NONE	KVRDIP 14	31C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	3	INORGANIC	73/75	GBC	N.A.		1.04E 05		
1210	GATE	NONE	KVRDIP 14	37C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		8.96E 06		
1212	GATE	NONE	KVRDIP 14	32C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		1.81E 06		
1213	FLIPFLOP	N.R.	KVRFPK 14		RADAR	FIELD Q		/ 0		
	JK	10	INORGANIC	75/78	AU	N.A.		4.01E 03		
1213	FLIPFLOP	N.R.	KVRFPK 14	74C	RADAR	RELPR Q	-054C 055C	/ 0		
	JK	10	INORGANIC	74/75	AU	TCVPC	6CY 2.2G 88%	2.80E 03		
1213	FLIPFLOP	NONE	KVRDIP 14	38C	COMMUNIC	FIELD G	025C	/ 0		
	JK	10	INORGANIC	75/76	GM	N.A.		3.46E 05		
1213	FLIPFLOP	NONE	KVRDIP 14	38C	COMMUNIC	REL Q	025C	/ 0		
	JK	10	INORGANIC	74/75	GM	EQP OP		3.73E 03		
1213	FLIPFLOP	NONE	KVRDIP 14	38C	COMMUNIC	RELPR Q	025C	/ 0		
	JK	10	INORGANIC	75/76	GM	EQP OP		1.07E 05		
1213	FLIPFLOP	NONE	KVRDIP 14	38C	DIG PROC	FIELD G	025C	/ 0		
	JK	10	INORGANIC	73/75	GBC	N.A.		5.38E 05		
1216	FLIPFLOP	NONE	KVRDIP 14	39C	DIG PROC	FIELD G	025C	/ 0		
	RS	12	INORGANIC	73/75	GBC	N.A.		7.47E 05		
1227	FLIPFLOP	NONE	KVRDIP 14	50C	DIG PROC	FIELD G	025C	/ 0		
	JK	10	INORGANIC	73/75	GBC	N.A.		6.08E 05		

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MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1228	DECODE/DEMUX	NONE	KVRDIP 16	42C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	11	INORGANIC	73/75	GBC	N.A.		4.03E 06		
1229	ARRAY	NONE	KVRDIP 14	41C	DIG PROC	FIELD G	025C	/ 1		
	N.R.	6	INORGANIC	73/75	GBC	N.A.		1.74E 05		
1230	GATE	NONE	KVRDIP 14	38C	DIG PROC	FIELD G	025C	/ 1		
	N.R.	16	INORGANIC	73/75	GBC	N.A.		1.27E 06		
1231	GATE	NONE	KVRDIP 14	38C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	16	INORGANIC	73/75	GBC	N.A.		6.95E 04		
1232	FLIPFLOP	NONE	KVRDIP 16	43C	DIG PROC	FIELD G	025C	/ 2		
	JK	16	INORGANIC	73/75	GBC	N.A.		4.86E 06		
1234	FLIPFLOP	NONE	KVRDIP 14	49C	DIG PROC	FIELD G	025C	/ 0		
	D	6	INORGANIC	73/75	GBC	N.A.		5.73E 05		
1238	DECODE/DEMUX	NONE	KVRDIP 14	40C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	13	INORGANIC	73/75	GBC	N.A.		1.34E 06		
1240	LATCH	NONE	KVRDIP 14	50C	DIG PROC	FIELD G	025C	/ 1		
	BISTABLE	28	INORGANIC	73/75	GBC	N.A.		2.47E 06		
1242	DECODER	NONE	KVRDIP 16	50C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	8	INORGANIC	73/75	GBC	N.A.		5.56E 05		
1243	DECODER	NONE	KVRDIP 14	46C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	8	INORGANIC	73/75	GBC	N.A.		1.56E 05		
1246	GENERATOR	NONE	KVRDIP 14	46C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	7	INORGANIC	73/75	GBC	N.A.		2.26E 05		
1247	GATE	NONE	KVRDIP 14	38C	DIG PROC	FIELD G	025C	/ 1		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		1.46E 06		
1248	GATE	NONE	KVRDIP 14	38C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	73/75	GBC	N.A.		3.65E 05		
1259	ADDER	NONE	KVRDIP 16	63C	DIG PROC	FIELD G	025C	/ 0		
	FULL	12	INORGANIC	73/75	GBC	N.A.		6.95E 04		
1660	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	2	INORGANIC	72/74	ALU	N.A.		3.78E 03		
1660	GATE	NONE	KVRFPK 16	310C	NA	LIFE V	300C	16/ 0		
	N.R.	2	INORGANIC	74/74	NA	STGLIFE		3.23E 04		
1660	GATE	NONE	KVRFPK 16	135C	NA	LIFE V	125C	200/ 0		
	N.R.	2	INORGANIC	74/75	NA	REVBias		1.61E 06		
1660	GATE	NONE	KVRDIP 16	125C	NA	LIFE V	125C	49/ 0		
	N.R.	2	INORGANIC	74/75	NA	REVBias		4.94E 04		
1660	GATE	NONE	KVRDIP 16	52C	DISPLAY	FIELD U	040C	/ 4		
	N.R.	2	INORGANIC	75/77	GBC	N.A.		3.26E 06		

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MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1661	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	2	INORGANIC	74/75	AIU	N.A.		3.75E 03		
1662	GATE	NONE	KVRDIP 16	125C	NA	LIFE V	125C	26/ 0		
	N.R.	4	INORGANIC	74/74	NA	STGLIFE		2.10E 05		
1662	GATE	NONE	KVRDIP 16	175C	NA	LIFE V	175C	21/ 0		
	N.R.	4	INORGANIC	74/74	NA	STGLIFE		2.12E 04		
1662	GATE	NONE	KVRDIP 16	75C	NA	LIFE V	075C	77/ 1	1/DEGRADED	
	N.R.	4	INORGANIC	74/75	NA	REVBias		6.21E 05		
1662	GATE	NONE	KVRDIP 16	125C	NA	LIFE V	125C	76/ 1	1/DEGRADED	
	N.R.	4	INORGANIC	74/75	NA	REVBias		7.66E 04		
1662	GATE	NONE	KVRDIP 16	64C	DISPLAY	FIELD U	040C 551PWR	/ 8		
	N.R.	4	INORGANIC	75/77	GBC	N.A.		7.79E 06		
1663	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 1	1/ OPEN	
	N.R.	4	INORGANIC	74/75	AIU	N.A.		1.12E 04		
1663	GATE	B-1	KVRFPK 14	75C	SONAR	FIELD G	025C	/ 0		
	N.R.	4	INORGANIC	74/76	NSS	N.A.		1.08E 05		
1663	GATE	B-1	KVRFPK 14	75C	SONAR	REL Q	025C	/ 0		
	N.R.	4	INORGANIC	74/74	NSS	EQP OP		1.57E 04		
1663	GATE	B-1	KVRFPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	4	INORGANIC	74/74	NSS	VIB FTC	1 AXIS	2.66E 03		
						EQP OP	025C	/ 0		
								7.96E 03		
1663	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	INORGANIC	72/74	AIU	N.A.		1.13E 04		
1664	GATE	NONE	KVRFPK 16	135C	NA	LIFE V	125C	200/ 1	1/DEGRADED	
	N.R.	4	INORGANIC	74/75	NA	REVBias		8.06E 05		
1664	GATE	NONE	KVRDIP 16	200C	NA	LIFE U	200C	30/ 2	2/DEGRADED	
	N.R.	4	INORGANIC	74/75	NA	REVBias		4.50E 05		
1664	GATE	NONE	KVRDIP 16		NA	LIFE U		20/ 16	4/DEGRADED	
	N.R.	4	INORGANIC	74/75	NA	REVBias		2.00E 05	6/DEGRADED	
									6/CATASTROPHIC	
1664	GATE	NONE	KVRDIP 16	64C	DISPLAY	FIELD U	040C 551PWR	/ 0		
	N.R.	4	INORGANIC	75/77	GBC	N.A.		1.06E 06		
1670	FLIPFLOP	NONE	KVRDIP 16	125C	NA	LIFE V	125C	26/ 0		
	D	7	INORGANIC	74/74	NA	STGLIFE		2.10E 05		
1670	FLIPFLOP	NONE	KVRDIP 16	175C	NA	LIFE V	175C	26/ 0		
	D	7	INORGANIC	74/74	NA	STGLIFE		2.62E 04		
1670	FLIPFLOP	NONE	KVRDIP 16	75C	NA	LIFE V	075C	77/ 1	1/DEGRADED	
	D	7	INORGANIC	74/75	NA	REVBias		6.21E 05		

DIGITAL DEVICE DATA

MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1670	FLIPFLOP D	NONE 7	KVRDIP 16 INORGANIC	125C 74/75	NA NA	LIFE V REVBias	125C	123/ 2 1.24E 05	2/DEGRADED	
1670	FLIPFLOP D	NONE 7	KVRDIP 16 INORGANIC	62C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 0 5.85E 03		
1671	FLIPFLOP D	C-1 7	KVRFPK 14 INORGANIC	 72/74	RADAR AIU	FIELD Q N.A.		/ 0 1.13E 04		
1679	COUNTER BINARY	B-1 34	KVRDIP 16 INORGANIC	100C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.08E 05		
1679	COUNTER BINARY	B-1 34	KVRDIP 16 INORGANIC	100C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.57E 04		
1679	COUNTER BINARY	B-1 34	KVRDIP 16 INORGANIC	 74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 2.66E 03		
						EQP OP	025C	/ 0 7.96E 03		

PLESSEY ECL		:MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCR.N. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS
:	:	: NO.	: CHIP	: TEST	: APPL.	: TEST	:	: PART	:
:	:	: GATES	: PROTECT.	: DATE	: ENV.	: TYPE	:	: HOURS	:
: 8602	: COUNTER	: B-1	: NICAN	: 8	: 71C	: COMMUNIC	: CHECK Q	: -54C 055C	: / 0
:	: N.R.	: 4	: N.R.	:	: 75/76	: AI	: TCVPC	: 14CY 2.2G70%	: 1.35E 04
: 8602	: COUNTER	: B-1	: NICAN	: 8	: 71C	: COMMUNIC	: REL Q	: -054C 055C	: / 0
:	: N.R.	: 4	: N.R.	:	: 75/75	: AI	: TCVPC	: 140CY2.2G70%	: 4.69E 03
: 8602	: COUNTER	: B-1	: NICAN	: 8	: 71C	: COMMUNIC	: RELPR Q	: -054C 055C	: / 0
:	: N.R.	: 4	: N.R.	:	: 74/75	: AI	: TCVPC	: 16CY2.2G 70%	: 6.63E 03
: 8602	: COUNTER	: B-1	: NICAN	: 8	: 71C	: COMMUNIC	: RELPR Q	: -054C 055C	: / 0
:	: N.R.	: 4	: N.R.	:	: 75/76	: AI	: TCVPC	: 16CY 2.2G70%	: 2.12E 03

DIGITAL DEVICE DATA

SIGNETICS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
10109	GATE N.R.	NONE 2	KVRDIP 16 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	53/ 0 4.24E 05	
10109	GATE N.R.	NONE 2	KVRDIP 16 N.R.	130C /74	NA NA	LIFE V OP CNST	125C	45/ 0 3.13E 05	
10111	GATE N.R.	NONE 2	KVRDIP 16 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	62/ 0 4.34E 05	
10111	GATE N.R.	NONE 2	KVRDIP 16 N.R.	139C /74	NA NA	LIFE V OP CNST	125C	44/ 0 3.08E 05	
10131	FLIPFLOP D	NONE 14	KVRDIP 16 N.R.	146C /74	NA NA	LIFE V OP CNST	125C	43/ 0 3.44E 05	
10131	FLIPFLOP D	NONE 14	EADIP 16 N.R.	163C 74/74	NA NA	LIFE V OP CNST	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
10133	LATCH D	NONE 30	KVRDIP 16 N.R.	151C 74/74	NA NA	LIFE V OP CNST	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
10141	SHIFT REG N.R.	NONE	KVRDIP 16 N.R.	300C 74/74	NA NA	LIFE V STGLIFE	300C	49/ 0 4.90E 04	
						EM		49/ 1 0.	1/CATASTROPHIC GLASS
10164	MULTIPLEXER N.R.	NONE 12	KVRDIP 16 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	47/ 0 9.40E 04	
						EM		47/ 1 0.	1/ OPEN
10164	MULTIPLEXER N.R.	NONE 12	KVRDIP 16 N.R.	151C /74	NA NA	LIFE V OP CNST	125C	44/ 0 1.76E 05	
10164	MULTIPLEXER N.R.	NONE 12	KVRDIP 16 N.R.	151C 74/74	NA NA	LIFE V OP CNST	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
10164	MULTIPLEXER N.R.	NONE 12	KVRDIP 16 N.R.	151C 74/74	NA NA	LIFE V OP DYN	125C	47/ 0 9.40E 04	
						EM		47/ 1 0.	1/DELTA
10174	MULTIPLEXER N.R.	NONE 12	KVRDIP 16 N.R.	151C 74/74	NA NA	LIFE V OP CNST	125C	22/ 0 2.20E 04	
						EM		22/ 0 0.	
10174	MULTIPLEXER N.R.	NONE 12	EADIP 16 N.R.	171C 74/74	NA NA	LIFE V OP CNST	125C	46/ 0 9.20E 04	
						EM		46/ 0 0.	
10231	FLIPFLOP D	NONE 18	KVRDIP 16 N.R.	145C 74/74	NA NA	LIFE V OP CNST	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP	TEST	APPL.	TEST		PART			
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS			
10101	GATE	NONE	KVRDIP 16	250C	NA	LIFE Q	250C	15/ 2	1/DEGRADED		
	N.R.	4	N.R.	74/76	NA	STGLIFE		6.98E 04	1/DEGRADED		
						STAT EM		13/ 0			
								0.			
10101	GATE	NONE	KVRDIP 16	250C	NA	LIFE Q	250C	15/ 0			
	N.R.	4	N.R.	74/76	NA	STGLIFE		6.98E 04			
						STAT EM		15/ 0			
								0.			
10101	GATE	NONE	KVRDIP 16	254C	NA	LIFE Q	245C	5/ 3	1/DEGRADED		
	N.R.	4	N.R.	74/76	NA	OP CNST	IL 25MA FO 4	1.75E 04	SURFACE		
									1/DEGRADED		
									METAL		
									ELECTRO MIGR		
									TEMPERATURE		
									1/DEGRADED		
									METAL		
									ELECTRO MIGR		
									TEMPERATURE		
						STAT EM		2/ 1	1/DEGRADED		
								0.	METAL		
									ELECTRO MIGR		
									TEMPERATURE		
10101	GATE	NONE	KVRDIP 16	255C	NA	LIFE Q	245C	5/ 4	1/DEGRADED		
	N.R.	4	N.R.	74/76	NA	OP CNST	IL 25MA FO 4	1.50E 04	METAL		
									ELECTRO MIGR		
									TEMPERATURE		
									3/DEGRADED		
									METAL		
									ELECTRO MIGR		
						STAT EM		1/ 1	1/DEGRADED		
								0.	METAL		
									ELECTRO MIGR		
									TEMPERATURE		

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
10101	GATE N.R.	NONE 4	KVRDIP 16 N.R.	254C 74/76	NA NA	LIFE Q OP CNST	245C IL 50MA FO 3	5/ 3 1.75E 04	3/DEGRADED METAL ELECTRO MIGR: TEMPERATURE
						STAT EM		2/ 0 0.	
10101	GATE N.R.	NONE 4	KVRDIP 16 N.R.	255C 74/76	NA NA	LIFE Q OP CNST	245C IL 50MA FO 3	5/ 2 5.00E 03	2/SHORT METAL ELECTRO MIGR:
						STAT EM		3/ 3 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE
									2/SHORT METAL ELECTRO MIGR:
10101	GATE N.R.	NONE 4	KVRDIP 16 N.R.	254C 74/76	NA NA	LIFE Q OP CNST	245C IL 70MA FO 2	5/ 4 1.75E 04	1/DEGRADED SURFACE 1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE
									2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE
						STAT EM		1/ 0 0.	
10101	GATE N.R.	NONE 4	KVRDIP 16 N.R.	255C 74/76	NA NA	LIFE Q OP CNST	245C IL 70MA FO 2	5/ 3 5.00E 03	3/DEGRADED METAL ELECTRO MIGR:
						STAT EM		2/ 2 0.	2/DEGRADED METAL ELECTRO MIGR:
10106	GATE N.R.	NONE 3	KVRDIP 16 N.R.	250C 74/76	NA NA	LIFE Q STGLIFE	250C	15/ 0 6.98E 04	
						STAT EM		15/ 0 0.	

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10106	GATE N.R.	NONE 3	KVRDIP 16 N.R.	252C 74/76	NA NA	LIFE Q OP CNST	245C IL 25MA FO 3	5/ 2 1.75E 04	2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
						STAT EM		3/ 1	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
10106	GATE N.R.	NONE 3	KVRDIP 16 N.R.	252C 74/76	NA NA	LIFE Q OP CNST	245C IL 50MA FO 3	5/ 0 1.75E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
						STAT EM		5/ 1	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
10106	GATE N.R.	NONE 3	KVRDIP 16 N.R.	252C 74/76	NA NA	LIFE Q OP CNST	245C IL 70MA FO 2	5/ 2 1.75E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
						STAT EM		3/ 1	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
10106	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	250C 74/76	NA NA	LIFE Q STGLIFE	250C	15/ 1 6.98E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
						STAT EM		14/ 0	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
10106	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	253C 74/76	NA NA	LIFE Q OP CNST	245C IL 25MA FO 3	5/ 1 1.75E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
						STAT EM		4/ 2	2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10106	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	253C 74/76	NA NA	LIFE Q OP CNST	245C IL 50MA FO 3	5/ 4 1.75E 04	1/DEGRADED	METAL ELECTRO MIGR: TEMPERATURE
									2/DEGRADED	METAL ELECTRO MIGR: TEMPERATURE
									1/DEGRADED	METAL ELECTRO MIGR: TEMPERATURE
						STAT EM		1/ 0		
								0.		
10106	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	253C 74/76	NA NA	LIFE Q OP CNST	245C IL 70MA FO 2	5/ 4 1.00E 04	3/DEGRADED	METAL ELECTRO MIGR: TEMPERATURE
									1/DEGRADED	METAL ELECTRO MIGR: TEMPERATURE
						STAT EM		1/ 1	1/DEGRADED	METAL ELECTRO MIGR: TEMPERATURE
								0.		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	250C 74/76	NA NA	LIFE Q STGLIFE	250C	15/ 0 6.98E 04		
						STAT EM		15/ 0		
								0.		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	300C 74/76	NA NA	LIFE Q STGLIFE	300C	15/ 1 6.00E 04	1/DEGRADED	
						STAT EM		14/ 0		
								0.		

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	225C 74/76	NA NA	LIFE Q OP CNST	215C IL 50MA FO 3	5/ 2 1.85E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE 1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
						STAT EM		3/ 1 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	225C 74/76	NA NA	LIFE Q OP CNST	215C IL 70MA FO 2	5/ 3 1.12E 04	3/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
						STAT EM		2/ 2 0.	2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	225C 74/76	NA NA	LIFE Q OP CNST	215C IL MA FO 4	5/ 0 1.85E 04			
						STAT EM		5/ 1 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	255C 74/76	NA NA	LIFE Q OP CNST	245C IL 25MA FO 4	5/ 1 1.50E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
						STAT EM		4/ 1 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	255C 74/76	NA NA	LIFE Q OP CNST	245C IL 50MA FO 3	5/ 4 7.50E 03	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
									3/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
						STAT EM		1/ 1 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	255C 74/76	NA NA	LIFE Q OP CNST	245C IL 70MA FO 2	5/ 4 1.50E 04	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
									1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE		
						STAT EM		1/ 0 0.			

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	280C 74/76	NA NA	LIFE Q OP CNST	270C IL 25MA FO 4	5/ 3 5.00E 03	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
									2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
									2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
									2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
						STAT EM		2/ 2		
								0.		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	280C 74/76	NA NA	LIFE Q OP CNST	270C IL 50MA FO 3	5/ 4 5.00E 03	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
									2/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
									1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
						STAT EM		1/ 1	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE :	
								0.		

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10501	GATE N.R.	NONE 4	KVRDIP 16 N.R.	280C 74/76	NA NA	LIFE Q OP CNST	270C IL 70MA FO 2	5/ 3 1.25E 03	3/DEGRADED METAL ELECTRO MIGR TEMPERATURE	
						STAT EM		2/ 2 0.	2/DEGRADED METAL ELECTRO MIGR TEMPERATURE	
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	250C 74/76	NA NA	LIFE Q STGLIFE	250C	15/ 0 6.98E 04		
						STAT EM		15/ 0 0.		
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	300C 74/76	NA NA	LIFE Q STGLIFE	300C	15/ 0 6.00E 04		
						STAT EM		15/ 0 0.		
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	223C 74/76	NA NA	LIFE Q OP CNST	215C IL 25MA FO 3	5/ 0 1.85E 04		
						STAT EM		5/ 0 0.		
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	223C 74/76	NA NA	LIFE Q OP CNST	215C IL 50MA FO 3	5/ 0 1.85E 04		
						STAT EM		5/ 0 0.		
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	223C 74/76	NA NA	LIFE Q OP CNST	215C IL 70MA FO 2	5/ 4 1.85E 04	3/DEGRADED DIE ELECTRO MIGR 1/DEGRADED DIE ELECTRO MIGR	
						STAT EM		1/ 1 0.	1/DEGRADED DIE ELECTRO MIGR	
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	253C 74/76	NA NA	LIFE Q OP CNST	245C IL 25MA FO 3	5/ 0 1.75E 04		
						STAT EM		5/ 0 0.		

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	253C 74/76	NA NA	LIFE Q OP CNST	245C IL 50MA FO 3	5/ 1 1.75E 04	1/DEGRADED DIE ELECTRO MIGR:
						STAT EM		4/ 1 0.	1/DEGRADED DIE ELECTRO MIGR:
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	253C 74/76	NA NA	LIFE Q OP CNST	245C IL 70MA FO 2	5/ 2 1.75E 04	2/DEGRADED DIE ELECTRO MIGR:
						STAT EM		3/ 0 0.	
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	278C 74/76	NA NA	LIFE Q OP CNST	270C IL 25MA FO 3	5/ 0 1.75E 04	
						STAT EM		5/ 0 0.	
10506	GATE N.R.	NONE 3	KVRDIP 16 INORGANIC	278C 74/76	NA NA	LIFE Q OP CNST	270C IL 50MA FO 3	5/ 3 1.75E 04	1/DEGRADED OXIDE 1/DEGRADED ELECTRO MIGR: 1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE
						STAT EM		2/ 1 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10506	GATE N.R.	NONE	KVRDIP 16 INORGANIC	278C 74/76	NA	LIFE Q OP CNST	270C IL 70MA FO 2	5/ 4 1.30E 04	1/DEGRADED DIE ELECTRO MIGR: 1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE 2/DEGRADED ELECTRO MIGR:	
						STAT EM		1/ 1 0.	1/DEGRADED METAL ELECTRO MIGR: TEMPERATURE	
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	250C 74/76	NA	LIFE Q STGLIFE	250C	15/ 0 6.98E 04		
						STAT EM		15/ 0 0.		
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	300C 74/76	NA	LIFE Q STGLIFE	300C	15/ 0 6.00E 04		
						STAT EM		15/ 1 0.	1/DEGRADED	
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA	LIFE Q OP CNST	195C IL 25MA FO 7	5/ 0 2.35E 04		
						STAT EM		5/ 1 0.	1/DEGRADED	
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA	LIFE Q OP CNST	195C IL 25MA FO 7	5/ 0 1.85E 04		
						STAT EM		5/ 0 0.		
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA	LIFE Q OP CNST	195C IL 25MA FO 7	5/ 0 1.75E 04		
						STAT EM		5/ 1 0.	1/DEGRADED	

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA NA	LIFE Q OP CNST	195C IL 50MA FO 4	5/ 3 2.35E 04	1/DEGRADED SURFACE 1/DEGRADED DIE ELECTRO MIGR: 1/DEGRADED DIE ELECTRO MIGR:	
						STAT EM		2/ 0 0.		
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA NA	LIFE Q OP CNST	195C IL 50MA FO 4	5/ 2 1.85E 04	2/DEGRADED DIE ELECTRO MIGR:	
						STAT EM		3/ 1 0.	1/DEGRADED	
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA NA	LIFE Q OP CNST	195C IL 50MA FO 4	5/ 4 1.75E 04	1/DEGRADED 2/DEGRADED DIE ELECTRO MIGR: 1/DEGRADED DIE ELECTRO MIGR:	
						STAT EM		1/ 0 0.		
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA NA	LIFE Q OP CNST	195C IL 70MA FO 3	5/ 4 1.85E 04	1/DEGRADED DIE ELECTRO MIGR: 2/DEGRADED DIE ELECTRO MIGR: 1/DEGRADED DIE ELECTRO MIGR:	
						STAT EM		1/ 1 0.	1/DEGRADED DIE ELECTRO MIGR:	

DIGITAL DEVICE DATA

VARIOUS ECL		MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA NA	LIFE Q OP CNST	195C IL 70MA FO 3	5/ 2 5.00E 03	1/DEGRADED OXIDE 1/DEGRADED DIE ELECTRO MIGR	
						STAT EM		3/ 3 0.	3/DEGRADED DIE ELECTRO MIGR	
10561	DECODER BINARY	NONE 12	KVRDIP 16 N.R.	227C 74/76	NA NA	LIFE Q OP CNST	195C IL 70MA FO 3	5/ 4 1.75E 04	1/DEGRADED DIE ELECTRO MIGR 3/DEGRADED DIE ELECTRO MIGR	
						STAT EM		1/ 0 0.		
16608	GATE N.R.	C-1 2	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 3.29E 04		
16638	GATE N.R.	C-1 4	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 1 9.86E 04		
1671	FLIPFLOP D	C-1 6	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 1 9.86E 04		
95H90	COUNTER N.R.	B-1 N.R.	DIP 16 N.R.	65C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 14CY 2.2G70X	/ 0 1.35E 04		
95H90	COUNTER N.R.	B-1 N.R.	DIP 16 N.R.	65C 75/76	COMMUNIC AI	CHECK Q TCVPC	-054C 055C 15CY 2.2G70X	/ 0 1.41E 04		
95H90	COUNTER N.R.	B-1 N.R.	DIP 16 N.R.	65C 75/75	COMMUNIC AI	REL Q TCVPC	-054C 055C 140CY2.2G70X	/ 0 5.86E 03		
95H90	COUNTER N.R.	B-1 N.R.	DIP 16 N.R.	65C 74/75	COMMUNIC AI	RELPR Q TCVPC	-054C 055C 16CY2.2G 70X	/ 0 6.63E 03		
95H90	COUNTER N.R.	B-1 N.R.	DIP 16 N.R.	65C 74/76	COMMUNIC AI	RELPR Q TCVPC	-054C 055C 16CY 2.2G70X	/ 0 1.35E 04		
95H90	COUNTER N.R.	NONE 8	KVRDIP 16 N.R.	35C 75/76	COMMUNIC GM	FIELD G N.A.	025C	/ 0 1.73E 05		
95H90	COUNTER N.R.	NONE 8	KVRDIP 16 N.R.	35C 74/75	COMMUNIC GM	REL Q EQP OP	025C	/ 0 1.87E 03		
95H90	COUNTER N.R.	NONE 8	KVRDIP 16 N.R.	35C 75/76	COMMUNIC GM	RELPR Q EQP OP	025C	/ 0 5.36E 04		

DIGITAL DEVICE DATA

FAIRCHILD		MANUFACTURER		RELIABILITY ANALYSIS CENTER						
TTL, HIGH SPEED		OPERATIONAL TYPE								
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
93H00	SHIFT REG	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0		
	N.R.	40	INORGANIC	76/76	GF	N.A.		9.74E 04		

ITT		MANUFACTURER		RELIABILITY ANALYSIS CENTER						
TTL, HIGH SPEED		OPERATIONAL TYPE								
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H00	GATE	JB	KVRDIP 14	82C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.02E 04		
54H00	GATE	JB	KVRDIP 14	82C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.29E 04		
54H00	GATE	JB	KVRDIP 14	82C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	7.07E 03		
54H00	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		5.50E 04		
54H00	GATE	C-1	KVRDIP 14	136C	NA	LIFE V	125C 100X	77/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT		7.70E 04		
54H00	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	25/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		2.50E 04		
54H00	GATE	NONE	EADIP 14	136C	NA	LIFE V	125C	52/ 1		
	N.R.	4	N.R.	/75	NA	RINGCNT		5.20E 04		
54H10	GATE	JB	KVRDIP 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	3	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	6.13E 03		
54H10	GATE	JB	KVRDIP 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	3	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	7.75E 03		
54H10	GATE	JB	KVRDIP 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	3	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	4.24E 03		
54H10	GATE	B-2	KVRFPK 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	3	N.R.	/75	NA	STGLIFE		5.50E 04		
54H10	GATE	B-2	KVRFPK 14	133C	NA	LIFE V	125C	55/ 0		
	N.R.	3	N.R.	/75	NA	RINGCNT		5.50E 04		
54H20	GATE	JB	KVRDIP 14	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	2.04E 03		
54H20	GATE	JB	KVRDIP 14	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.58E 03		
54H20	GATE	JB	KVRDIP 14	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	1.41E 03		
54H30	GATE	B-1	KVRDIP 14	150C	NA	LIFE V	150C	105/ 1		
	N.R.	1	N.R.	/74	NA	STGLIFE		1.05E 05		
54H30	GATE	B-1	KVRDIP 14	128C	NA	LIFE V	125C 100X	176/ 1		
	N.R.	1	N.R.	/74	NA	RINGCNT		1.76E 05		
54H73	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE V	150C	34/ 0		
	JK	6	N.R.	/74	NA	STGLIFE		3.40E 04		
54H73	FLIPFLOP	C-1	KVRDIP 14	144C	NA	LIFE V	125C::100X	105/ 0		
	JK	6	N.R.	/74	NA	RINGCNT		1.05E 05		

DIGITAL DEVICE DATA

ITT TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
174N00	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	105/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		1.05E 05	
174N00	GATE	NONE	EADIP 14	136C	NA	LIFE V	125C	105/ 0	
	N.R.	4	N.R.	/75	NA	RINGCNT		5.25E 04	
174N10	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	105/ 0	
	N.R.	3	N.R.	/75	NA	STGLIFE		1.05E 05	
174N10	GATE	NONE	EADIP 14	133C	NA	LIFE V	125C	105/ 0	
	N.R.	3	N.R.	/75	NA	RINGCNT		5.25E 04	
174N40	BUFFER	NONE	EADIP 14	150C	NA	LIFE V	150C	34/ 0	
	N.R.	2	N.R.	/75	NA	STGLIFE		3.40E 04	
174N40	BUFFER	NONE	EADIP 14	136C	NA	LIFE V	125C	105/ 0	
	N.R.	2	N.R.	/75	NA	RINGCNT		1.05E 05	
174N73	FLIPFLOP	C-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	JK	16	N.R.	/75	NA	STGLIFE		2.20E 04	
19000	FLIPFLOP	C-2	KVRDIP 14	150C	NA	LIFE V	150C	11/ 0	
	JK	13	N.R.	/75	NA	STGLIFE		1.10E 04	
19002	GATE	C-2	KVRDIP 14	150C	NA	LIFE V	150C	215/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		2.15E 05	
19002	GATE	C-2	KVRDIP 14	131C	NA	LIFE V	125C	52/ 0	
	N.R.	4	N.R.	/75	NA	RINGCNT		1.86E 05	
19003	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	127/ 0	
	N.R.	3	N.R.	/75	NA	STGLIFE		1.27E 05	
19003	GATE	NONE	KVRDIP 14	129C	NA	LIFE V	125C	531/ 2	
	N.R.	3	N.R.	/75	NA	RINGCNT		7.43E 05	
19008	GATE	C-2	KVRDIP 14	130C	NA	LIFE V	125C	53/ 0	
	EXPANDABLE	5	N.R.	/75	NA	RINGCNT		5.30E 04	

DIGITAL DEVICE DATA

MOTOROLA TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
3003	GATE	NONE	EADIP 14	55C	DISPLAY	FIELD U	040C 55IPWR	/ 4		
	N.R.	4	INORGANIC	75/77	GBC	N.A.		1.60E 07		
3005	GATE	NONE	KVRDIP 14	135C	NA	LIFE V	125C	150/ 0		
	N.R.	3	INORGANIC	75/75	NA	RINGCNT		1.10E 06		
3100	GATE	A-1	KVRDIP 14	34C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	4	INORGANIC	72/74	SF	N.A.		2.17E 05		
3101	GATE	A-1	KVRDIP 14	36C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	4	INORGANIC	72/74	SF	N.A.		1.24E 05		
3110	GATE	A-1	KVRDIP 14	29C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		1.56E 04		
3115	GATE	A-1	KVRDIP 14	27C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	1	INORGANIC	72/74	SF	N.A.		3.11E 04		
3124	BUFFER	NONE	KVRDIP 14	34C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		1.04E 05		
3125	GATE	A-1	KVRDIP 14	32C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		1.56E 04		
3126	GATE	A-1	KVRDIP 14	34C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		4.67E 04		
3126	GATE	NONE	KVRDIP 14	34C	DIG PROC	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	73/75	GBC	N.A.		2.08E 05		
3151	FLIPFLOP	A-1	KVRDIP 14	30C	COMB/NOC	FIELD U	025C	/ 0		
	JK	8	INORGANIC	72/74	SF	N.A.		6.22E 04		
3160	FLIPFLOP	A-1	KVRDIP 14	37C	COMB/NOC	FIELD U	025C	/ 0		
	D	12	INORGANIC	72/74	SF	N.A.		1.86E 05		
3162	FLIPFLOP	A-1	KVRDIP 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	JK	16	INORGANIC	72/74	SF	N.A.		1.55E 05		
3162	FLIPFLOP	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	73/77	AU	TCVPC	6CY 2.2G 81X	2.84E 04		
3162	FLIPFLOP	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	73/77	AU	TCVPC	7CY 2.2G 81X	2.95E 04		
3162	FLIPFLOP	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	73/77	AU	TCVPC	8CY 2.2G 81X	6.27E 03		

NATIONAL TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H00	GATE	JB	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.02E 03		
54H00	GATE	JB	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.29E 03		

DIGITAL DEVICE DATA

RAYTHEON TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
3220	GATE	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	4	INORGANIC	72/74	SF	N.A.		4.82E 05		
3240	GATE	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		1.83E 05		

SIGNETICS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H00	GATE	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.62E 04		
54H00	GATE	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.12E 04		
54H04	INVERTER	JB	KVRDIP 14	86C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.43E 04		
54H04	INVERTER	JB	KVRDIP 14	86C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.81E 04		
54H04	INVERTER	JB	KVRDIP 14	86C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	9.89E 03		
54H04	INVERTED	B-1	KVRDIP 14	58C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	5.04E 03		
54H04	INVERTER	B-1	KVRDIP 14	58C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	6.59E 03		
54H08	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	2.58E 04		
54H08	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	3.37E 04		
54H103	FLIPFLOP JK	B-1	KVRDIP 14	62C	DIG PROC	REL Q	-054C 050C	/ 0		
		12	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	4.34E 03		
54H103	FLIPFLOP JK	B-1	KVRDIP 14	62C	DIG PROC	REL Q	-054C 050C	/ 0		
		12	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	5.67E 03		
54H10	GATE	B-1	KVRDIP 14	54C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	3	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.54E 03		
54H10	GATE	B-1	KVRDIP 14	54C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	3	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.01E 03		
54H20	GATE	B-1	KVRDIP 14	53C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	2.52E 03		
54H20	GATE	B-1	KVRDIP 14	53C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	3.29E 03		
54H21	GATE	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	5.32E 03		
54H21	GATE	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	6.95E 03		
54H30	GATE	B-1	KVRDIP 14	51C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	1	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.78E 03		
54H30	GATE	B-1	KVRDIP 14	51C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	1	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.94E 03		

DIGITAL DEVICE DATA

SIGNETICS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H40	BUFFER	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.54E 03		
54H40	BUFFER	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.01E 03		
54H53	GATE	B-1	KVRDIP 14	52C	DIG PROC	REL Q	-054C 050C	/ 0		
	EXPANDABLE	5	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	7.98E 03		
54H53	GATE	B-1	KVRDIP 14	52C	DIG PROC	REL Q	-054C 050C	/ 0		
	EXPANDABLE	5	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.04E 04		
54H73	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	16	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	4.48E 03		
54H73	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	16	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	5.86E 03		
54H76	FLIPFLOP	B-1	KVRDIP 16	87C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	75/75	AU	TCVPC	141CY2.2G70Z	7.75E 03		

DIGITAL DEVICE DATA

T.I. TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H00	GATE	A-1	KVRDIP 14	33C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	4	INORGANIC	72/74	SF	N.A.		3.11E 04		
54H00	GATE	A-1	SNFPK 14	36C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	4	INORGANIC	72/74	SF	N.A.		7.30E 05		
54H00	GATE	B-1	KVRFPK 14	37C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	4	INORGANIC	73/75	AI	EQP OP		4.83E 06		
54H00	GATE	B-1	KVRFPK 14	66C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	4	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	7.79E 04		
54H00	GATE	B-1	KVRFPK 14	83C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	/74	AU	TCVPC	178CY1.2G65X	1.41E 05		
54H00	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	4	INORGANIC	74/75	AIU	N.A.		1.76E 05		
54H00	GATE	B-1	KVRDIP 14	59C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	4	INORGANIC	75/75	GT	EQP OP	16CY 95X	2.32E 03		
54H00	GATE	B-1	KVRDIP 14	59C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	INORGANIC	75/75	GT	EQP OP	18CY 95X	1.13E 04		
54H00	GATE	B-1	KVRDIP 14	59C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	INORGANIC	75/75	GT	EQP OP	24CY 95X	1.70E 03		
54H00	GATE	B-2	KVRDIP 14	33C	SONAR	REL Q	025C	/ 0		
	N.R.	4	INORGANIC	74/75	NSS	EQP OP		1.80E 04		
54H00	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	INORGANIC	72/74	AIU	N.A.		2.34E 05		
54H00	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	6CY 1.3G 50X	1.08E 04		
54H01	GATE	B-1	KVRFPK 14	36C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	4	INORGANIC	73/75	AI	EQP OP		6.71E 06		
54H01	GATE	B-1	KVRFPK 14	82C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	/74	AU	TCVPC	178CY1.2G65X	4.28E 04		
54H04	INVERTER	B-1	KVRFPK 14	43C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP		1.70E 07		
54H04	INVERTER	B-1	KVRFPK 14	72C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	2.08E 05		
54H04	INVERTER	B-1	KVRFPK 14	89C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	/74	AU	TCVPC	178CY1.2G65X	1.33E 05		
54H04	INVERTER	B-1	KVRDIP 14	63C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	16CY 95X	1.55E 03		
54H04	INVERTER	B-1	KVRDIP 14	63C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	18CY 95X	7.56E 03		

DIGITAL DEVICE DATA

T.I. TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H04	INVERTER	B-1	KVRDIP 14	63C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	24CY	93X	1.13E 03	
54H04	INVERTER	B-2	KVRDIP 14	37C	SONAR	REL Q	025C	/ 0		
	N.R.	6	INORGANIC	74/75	NSS	EQP OP			5.15E 04	
54H04	INVERTER	B-2	EADIP 14	39C	PROCESS	REL Q	025C	/ 0		
	N.R.	6	INORGANIC	74/74	GBC	EQP OP			5.21E 03	
54H05	INVERTER	B-1	KVRFPK 14	43C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP			7.78E 05	
54H05	INVERTER	B-1	KVRFPK 14	72C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	14CY .71G62X		1.85E 03	
54H08	GATE	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	4	INORGANIC	76/76	GF	N.A.			2.56E 03	
54H103	FLIPPLOP JK	B-2	KVRFPK 14	97C	NAVIGATE	REL Q	-054C 071C	/ 0		
		12	INORGANIC	74/74	ML	TCVPC	14CY 2.2G62X		1.62E 03	
54H106	FLIPPLOP JK	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0		
		16	INORGANIC	76/76	GF	N.A.			2.17E 04	
54H10	GATE	B-1	KVRFPK 14	34C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	3	INORGANIC	73/75	AI	EQP OP			7.78E 05	
54H10	GATE	B-1	KVRFPK 14	63C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	3	INORGANIC	75/75	AI	TCVPC	14CY .71G62X		1.85E 03	
54H20	GATE	A-1	SNFPK 14	31C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.			1.56E 04	
54H20	GATE	B-1	KVRFPK 14	31C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	2	INORGANIC	73/75	AI	EQP OP			5.09E 06	
54H20	GATE	B-1	KVRFPK 14	60C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	14CY .71G62X		8.07E 04	
54H20	GATE	B-1	KVRFPK 14	77C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	/74	AU	TCVPC	178CY1.2G65X		5.13E 04	
54H20	GATE	B-2	KVRDIP 14	29C	SONAR	REL Q	025C	/ 0		
	N.R.	2	INORGANIC	74/75	NSS	EQP OP			2.58E 04	
54H30	GATE	A-1	KVRDIP 14	27C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	1	INORGANIC	72/74	SF	N.A.			1.56E 04	
54H30	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	1	INORGANIC	74/75	AIU	N.A.			4.50E 04	
54H30	GATE	B-2	KVRDIP 14	27C	SONAR	REL Q	025C	/ 0		
	N.R.	1	INORGANIC	74/75	NSS	EQP OP			4.12E 04	
54H51	GATE	B-1	KVRFPK 14	33C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP			5.37E 06	
54H51	GATE	B-1	KVRFPK 14	62C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	14CY .71G62X		1.02E 05	
54H51	GATE	B-1	KVRFPK 14	79C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	/74	AU	TCVPC	178CY1.2G65X		7.27E 04	

DIGITAL DEVICE DATA

T.T. HIGH SPEED		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
54H54	GATE	B-1	KVRFPK 14	30C	DIG PROC	CHECK Q	025C	/ 0			
	N.R.	5	INORGANIC	73/75	AI	EQP OP		9.48E 05			
54H54	GATE	B-1	KVRFPK 14	59C	DIG PROC	REL Q	-069C 054C	/ 0			
	N.R.	5	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.94E 04			
54H54	GATE	B-1	KVRFPK 14	70C	DIG PROC	REL Q	-054C 071C	/ 0			
	N.R.	5	INORGANIC	74	AU	TCVPC	178CY1.2G65X	8.56E 03			
54H55	GATE	B-1	KVRFPK 14		RADAR	FIELD Q		/ 0			
	EXPANDABLE	3	INORGANIC	72/74	AU	N.A.		1.56E 04			
54H55	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0			
	EXPANDABLE	3	INORGANIC	74/75	AIU	N.A.		1.16E 04			
54H60	EXPANDER	B-1	KVRFPK 14	56C	DIG PROC	REL Q	-069C 054C	/ 0			
	N.R.	2	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.23E 03			
54H72	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD Q		/ 0			
	JK	8	INORGANIC	72/74	AU	N.A.		5.21E 03			
54H72	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD G		/ 0			
	JK	8	INORGANIC	74/75	AIU	N.A.		3.86E 03			
54H73	FLIPFLOP	A-1	SNFPK 14	46C	COMB/NOC	FIELD U	025C	/ 0			
	JK	16	INORGANIC	72/74	SF	N.A.		3.11E 04			
54H73	FLIPFLOP	B-1	KVRDIP 14		NAVIGATE	FIELD Q		/ 0			
	JK	16	INORGANIC	72/74	AI	N.A.		1.94E 03			
54H73	FLIPFLOP	B-1	KVRDIP 14	65C	DISPLAY	REL G	004C 051C	/ 0			
	JK	16	INORGANIC	75/75	GT	EQP OP	18CY 95X	3.78E 03			
54H74	FLIPFLOP	A-1	KVRDIP 14	39C	COMB/NOC	FIELD U	025C	/ 0			
	D	12	INORGANIC	72/74	SF	N.A.		3.11E 04			
54H74	FLIPFLOP	B-1	KVRFPK 14	45C	DIG PROC	CHECK Q	025C	/ 0			
	D	12	INORGANIC	73/75	AI	EQP OP		6.27E 06			
54H74	FLIPFLOP	B-1	KVRFPK 14	74C	DIG PROC	REL Q	-069C 054C	/ 0			
	D	12	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	7.21E 04			
54H74	FLIPFLOP	B-1	KVRFPK 14	91C	DIG PROC	REL Q	-054C 071C	/ 0			
	D	12	INORGANIC	74	AU	TCVPC	178CY1.2G65X	1.33E 05			
54H74	FLIPFLOP	B-2	KVRDIP 14	39C	SONAR	REL Q	025C	/ 0			
	D	12	INORGANIC	74/75	NSS	EQP OP		3.09E 05			
54H76	FLIPFLOP	B-1	KVRDIP 16	58C	DIG PROC	REL Q	-054C 050C	/ 0			
	JK	16	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	3.36E 03			
54H76	FLIPFLOP	B-1	KVRDIP 16	58C	DIG PROC	REL Q	-054C 050C	/ 0			
	JK	16	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	4.39E 03			
54H87	LOGIC UNIT	B-1	KVRDIP 14	74C	DIG PROC	REL Q	-054C 050C	/ 0			
	TRUE COMPLEM	14	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	3.64E 03			
54H87	LOGIC UNIT	B-1	KVRDIP 14	74C	DIG PROC	REL Q	-054C 050C	/ 0			
	TRUE COMPLEM	14	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	4.76E 03			
54H87	LOGIC UNIT	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0			
	TRUE COMPLEM	14	INORGANIC	76/76	GF	N.A.		5.11E 03			
7490A	COUNTER	NONE	EADIP 14	70C	NA	LIFE U	070C	25/ 1			
	DECADE	15	INORGANIC	72/75	NA	REVBias		2.50E 04			

DIGITAL DEVICE DATA

VARIOUS
TTL, HIGH SPEEDMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
154H00	GATE	JB	DIP 14			PROCESS	FIELD G	/ 0	
	N.R.	4	N.R.	74/75	AU	N.A.		1.71E 03	
154H00	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	2.42E 04	
154H00	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	1.73E 04	
154H00	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	4.03E 03	
154H00	GATE	JB	DIP 14		RADAR	REL Q		/ 0	
	N.R.	4	N.R.	77/77	AU	EQP OP		2.27E 04	
154H00	GATE	JB	DIP 14		RECORDER	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		8.54E 03	
154H00	GATE	JB	DIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03	
154H00	GATE	JB	DIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03	
154H00	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	76/76	GF	N.A.		1.47E 04	
154H00	GATE	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	4	N.R.	75/76	GT	N.A.		4.51E 04	
154H00	GATE	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 2	1/SHORT
	N.R.	4	N.R.	75/76	AI	TCVPC	835CY1.6G62X	6.89E 04	1/SHORT
154H00	GATE	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	N.R.	4	N.R.	75/76	GT	N.A.		2.06E 05	
154H00	GATE	B-1	DIP 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	76/76	GF	N.A.		3.52E 03	
154H00	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	4	N.R.	75/76	AU	N.A.		2.09E 06	
154H00	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		1.68E 04	
154H00	GATE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0	
	N.R.	4	N.R.	76/76	GT	EQP OP		3.45E 05	
154H00	GATE	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	75/78	AU	N.A.		4.15E 05	
154H00	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 2	
	N.R.	4	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	1.76E 05	
154H01	GATE	B-1	FPK 14		IDIG PROC	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		4.31E 04	
154H01	GATE	B-1	FPK 14		IDIG PROC	FIELD G		/ 0	
	N.R.	4	N.R.	74/76	AU	N.A.		2.22E 05	
154H04	INVERTER	JB	DIP 14		PROCESS	FIELD G		/ 0	
	N.R.	6	N.R.	74/75	AU	N.A.		1.71E 03	
154H04	INVERTER	JB	DIP 14		RADAR	REL Q		/ 0	
	N.R.	6	N.R.	77/77	AU	EQP OP		6.99E 04	
154H04	INVERTER	JB	DIP 14		RECORDER	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	AU	N.A.		8.54E 03	
154H04	INVERTER	JB	DIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03	
154H04	INVERTER	JB	DIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	6	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03	
154H04	INVERTER	B1/JB	DIP 14		RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	76/76	GF	N.A.		2.43E 04	

DIGITAL DEVICE DATA

VARIOUS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
154H04	INVERTER	B-1	FPK 14			DIG PROC	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	1AU	N.A.		4.31E 04		
154H04	INVERTER	B-1	FPK 14			DIG PROC	FIELD G		/ 0	
	N.R.	6	N.R.	74/76	1AU	N.A.		6.89E 05		
154H04	INVERTER	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C		/ 0	
	N.R.	6	N.R.	75/76	1GT	N.A.		3.01E 04		
154H04	INVERTER	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C		/ 0	
	N.R.	6	N.R.	75/76	1GT	N.A.		7.13E 04		
154H04	INVERTER	B-1	DIP 14	40C	RADAR	FIELD G	030C		/ 0	
	N.R.	6	N.R.	76/76	1GF	N.A.		8.26E 05		
154H04	INVERTER	B-1	KVRFPK 14			RADAR	FIELD G		/ 0	
	N.R.	6	N.R.	74/75	1AIU	N.A.		2.10E 05		
154H04	INVERTER	B-1	KVRDIP 14			DIG PROC	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	1AIU	N.A.		3.77E 05		
154H04	INVERTER	B-1	KVRDIP 14			DIG PROC	FIELD G		/ 0	
	N.R.	6	N.R.	74/76	1AIU	N.A.		7.43E 04		
154H04	INVERTER	B-1	KVRDIP 14			DISPLAY	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	1AI	N.A.		1.19E 04		
154H04	INVERTER	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C		/ 0	
	N.R.	6	N.R.	74/75	1AI	TCVPC	118CY2.2G53X	6.04E 03		
154H04	INVERTER	C-1	FPK 14			RADAR	FIELD G		/ 0	
	N.R.	6	N.R.	75/76	1AIU	N.A.		2.60E 06		
154H04	INVERTER	C-1	KVRFPK 14			RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	1AIU	N.A.		2.99E 05		
154H04	INVERTER	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C		/ 0	
	N.R.	6	N.R.	74/74	1AIU	TCVPC	6CY 1.3G 50X	1.34E 04		
154H04	INVERTER	C-1	KVRDIP 14	30C	RADAR	REL Q	020C		/ 0	
	N.R.	6	N.R.	76/76	1GT	EQP OP		3.75E 05		
154H10	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C		/ 0	
	N.R.	3	N.R.	73/77	1AU	TCVPC	6CY 2.2G 81X	2.84E 04		
154H10	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C		/ 0	
	N.R.	3	N.R.	73/77	1AU	TCVPC	7CY 2.2G 81X	2.95E 04		
154H10	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C		/ 0	
	N.R.	3	N.R.	73/77	1AU	TCVPC	8CY 2.2G 81X	6.27E 03		
154H10	GATE	C-1	FPK 14			RADAR	FIELD G		/ 0	
	N.R.	3	N.R.	75/76	1AIU	N.A.		1.06E 06		
154H10	GATE	C-1	KVRFPK 14			RADAR	FIELD Q		/ 0	
	N.R.	3	N.R.	72/74	1AIU	N.A.		1.25E 05		
154H10	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C		/ 0	
	N.R.	3	N.R.	74/74	1AIU	TCVPC	6CY 1.3G 50X	5.49E 03		
154H11	GATE	B-1	KVRDIP 14			PROCESS	FIELD G		/ 0	
	N.R.	3	N.R.	74/75	1AU	N.A.		3.42E 03		
154H11	GATE	B-1	KVRDIP 14			RECORDER	FIELD Q		/ 0	
	N.R.	3	N.R.	72/74	1AU	N.A.		1.71E 04		
154H11	GATE	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C		/ 0	
	N.R.	3	N.R.	73/74	1AU	TCVPC	411CY2.2G50X	9.87E 03		
154H11	GATE	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C		/ 0	
	N.R.	3	N.R.	75/76	1AU	TCVPC	139CY2.2G50X	3.33E 03		
154H20	GATE	B-1	KVRFPK 14			RADAR	FIELD G		/ 0	
	N.R.	2	N.R.	74/75	1AIU	N.A.		2.43E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H20	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	2	N.R.	75/76	AIU	N.A.		4.24E 05		
54H20	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AIU	N.A.		4.86E 04		
54H20	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	2.07E 03		
54H20	GATE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0		
	N.R.	2	N.R.	76/76	GT	EQP OP		2.67E 05		
54H21	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	2	N.R.	74/75	AIU	N.A.		4.29E 05		
54H21	GATE	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0		
	N.R.	2	N.R.	74/75	AU	N.A.		1.71E 03		
54H21	GATE	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AU	N.A.		8.54E 03		
54H21	GATE	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03		
54H21	GATE	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	2	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03		
54H21	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	2	N.R.	75/76	AIU	N.A.		3.91E 06		
54H21	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AIU	N.A.		8.47E 05		
54H21	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	3.75E 04		
54H21	GATE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/76	AU	TCVPC	10CY 2.2G81X	1.20E 03		
54H21	GATE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	4.26E 04		
54H21	GATE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	4.42E 04		
54H21	GATE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	9.41E 03		
54H30	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	1	N.R.	76/76	GF	N.A.		3.55E 04		
54H30	GATE	C-1	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AIU	N.A.		5.63E 04		
54H30	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	1	N.R.	75/76	AIU	N.A.		4.87E 05		
54H30	GATE	C-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	2.34E 03		
54H40	BUFFER	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	76/76	GF	N.A.		3.48E 04		
54H40	BUFFER	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0		
	N.R.	2	N.R.	76/76	GF	N.A.		2.22E 05		
54H40	BUFFER	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	2	N.R.	74/75	AIU	N.A.		4.87E 04		
54H40	BUFFER	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	2	N.R.	75/76	AIU	N.A.		1.13E 04		
				75/76				/ 1		
								9.86E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H40	BUFFER	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AIU	N.A.		3.22E 04		
54H40	BUFFER	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	1.80E 03		
54H40	BUFFER	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0		
	N.R.	2	N.R.	76/76	GT	EQP OP		1.79E 05		
54H40	BUFFER	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	75/78	AU	N.A.		6.70E 03		
54H40	BUFFER	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 053C	/ 0		
	N.R.	2	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	2.80E 03		
54H50	GATE	JB	DIP 14		RADAR	REL Q		/ 0		
	EXPANDABLE	6	N.R.	77/77	AIU	EQP OP		1.08E 04		
54H51	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AU	N.A.		7.32E 04		
54H51	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	N.R.	6	N.R.	74/76	AU	N.A.		3.78E 05		
54H51	GATE	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0		
	N.R.	6	N.R.	74/75	AU	N.A.		1.71E 03		
54H51	GATE	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AU	N.A.		8.54E 03		
54H51	GATE	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03		

DIGITAL DEVICE DATA

VARIOUS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H51	GATE	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	6	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03		
54H54	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	N.R.	5	N.R.	72/74	AU	N.A.		8.61E 03		
54H54	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	N.R.	5	N.R.	74/76	AU	N.A.		4.44E 04		
54H62	EXPANDER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	5	N.R.	72/74	AU	N.A.		6.03E 05		
54H62	EXPANDER	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	5	N.R.	74/76	AU	N.A.		1.19E 05		
54H73	FLIPFLOP	B-1	DIP 0	93C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	JK	16	N.R.	75/76	AI	TCVPC	835CY1.6G62X	2.07E 05		
54H73	FLIPFLOP	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	JK	16	N.R.	75/76	GT	N.A.		1.50E 04		
54H73	FLIPFLOP	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	JK	16	N.R.	75/76	GT	N.A.		6.88E 04		
54H74	FLIPFLOP	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	D	12	N.R.	72/74	AU	N.A.		1.33E 05		
54H74	FLIPFLOP	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	D	12	N.R.	74/76	AU	N.A.		6.89E 05		
54H74	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	D	12	N.R.	74/75	AU	N.A.		1.97E 05		
54H74	FLIPFLOP	C-1	FPK 14		RADAR	FIELD G		/ 0		
	D	12	N.R.	75/76	AU	N.A.		7.15E 05		
54H74	FLIPFLOP	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	D	12	N.R.	72/74	AU	N.A.		1.67E 05		
54H74	FLIPFLOP	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	D	12	N.R.	74/74	AU	TCVPC	6CY 1.3G 50X	7.38E 03		
54H76	FLIPFLOP	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0		
	JK	16	N.R.	75/78	AU	N.A.		3.47E 03		
54H76	FLIPFLOP	N.R.	KVRDIP 16	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	JK	16	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	8.40E 03		
74H76	FLIPFLOP	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 1		
	JK	16	N.R.	76/78	GBC	N.A.		1.53E 05		

DIGITAL DEVICE DATA

ADV MICRO DEV
TTL, LOW POWERMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
26L02	FLIPFLOP	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	MONOSTABLE	14	INORGANIC	76/77	AU	TCVPC	6CY 2.2G 81X	2.01E 04	
26L02	FLIPFLOP	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	MONOSTABLE	14	INORGANIC	76/77	AU	TCVPC	7CY 2.2G 81X	6.50E 03	
26L02	FLIPFLOP	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	MONOSTABLE	14	INORGANIC	76/77	AU	TCVPC	8CY 2.2G 81X	1.79E 03	

AMELCO
TTL, LOW POWERMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
500	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	70/74	SF	N.A.		3.57E 04	
501	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	70/74	SF	N.A.		2.23E 06	
503	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	70/74	SF	N.A.		1.07E 05	
504	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	73/74	SF	N.A.		3.06E 04	
505	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	70/74	SF	N.A.		9.43E 05	
507	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	73/74	SF	N.A.		1.02E 05	
509	FLIPFLOP	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	JK	4	N.R.	70/74	SF	N.A.		3.64E 06	
530	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	70/74	SF	N.A.		1.78E 05	
531	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	70/74	SF	N.A.		1.42E 05	
535	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	73/74	SF	N.A.		1.42E 05	
537	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	73/74	SF	N.A.		6.12E 04	
575	GATE	A-1	AUFFK 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	70/74	SF	N.A.		3.57E 04	

DIGITAL DEVICE DATA

FAIRCHILD TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
93L00	SHIFT REG	B-1	KVRFPK 16	64C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	40	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	1.23E 04		
93L00	SHIFT REG	B-1	KVRFPK 16	64C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	40	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	1.55E 04		
93L00	SHIFT REG	B-1	KVRFPK 16	64C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	40	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	8.48E 03		
93L00	SHIFT REG	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	40	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.94E 04		
93L00	SHIFT REG	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	40	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.45E 04		
93L00	SHIFT REG	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	40	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	1.34E 04		
93L00	SHIFT REG	B-1	KVRDIP 16	59C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	40	N.R.	75/75	GT	EQP OP	16CY 95X	1.39E 04		
93L01	DECODER	B-1	KVRFPK 16	60C	NAVIGATE	REL Q	-054C 055C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	5.11E 03		
93L01	DECODER	B-1	KVRFPK 16	60C	NAVIGATE	REL Q	-054C 055C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	6.46E 03		
93L01	DECODER	B-1	KVRFPK 16	60C	NAVIGATE	REL Q	-054C 055C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	3.53E 03		
93L01	DECODER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	4.08E 03		
93L01	DECODER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	5.16E 03		
93L01	DECODER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	2.83E 03		
93L01	DECODER	B-1	KVRDIP 16	56C	COMMUNIC	REL G	004C 051C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	GT	EQP OP	16CY 95X	2.71E 03		
93L01	DECODER	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	GT	EQP OP	18CY 95X	1.97E 04		
93L01	DECODER	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	GT	EQP OP	24CY 95X	5.66E 03		
93L08	LATCH	B-1	KVRFPK 24	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	60	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	3.57E 04		
93L08	LATCH	B-1	KVRFPK 24	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	60	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	4.52E 04		
93L08	LATCH	B-1	KVRFPK 24	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	60	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	2.47E 04		
93L09	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	16	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	8.17E 03		
93L09	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	16	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.03E 04		
93L09	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	16	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	5.65E 03		
93L09	MULTIPLEXER	B-1	KVRDIP 16	55C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	16	N.R.	75/75	GT	EQP OP	18CY 95X	2.94E 03		
93L09	MULTIPLEXER	B-1	KVRDIP 16	55C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	16	N.R.	75/75	GT	EQP OP	24CY 95X	1.13E 03		
93L10	COUNTER	B-1	KVRFPK 16	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	DECADE	38	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	6.13E 03		

DIGITAL DEVICE DATA

FAIRCHILD TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
93L10	COUNTER	B-1	KVRFPK 16	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	DECADE	38	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	7.75E 03	
93L10	COUNTER	B-1	KVRFPK 16	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	DECADE	38	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	4.24E 03	
93L10	COUNTER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0	
	DECADE	38	N.R.	74/75	AU	N.A.		1.71E 03	
93L10	COUNTER	B-1	KVRDIP 16	60C	DISPLAY	REL G	004C 051C	/ 0	
	DECADE	38	N.R.	75/75	GT	EQP OP	18CY 95X	4.20E 03	
93L10	COUNTER	B-1	KVRDIP 16	60C	DISPLAY	REL G	004C 051C	/ 0	
	DECADE	38	N.R.	75/75	GT	EQP OP	24CY 95X	1.70E 03	
93L10	COUNTER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0	
	DECADE	38	N.R.	72/74	AU	N.A.		8.54E 03	
93L10	COUNTER	B-1	KVRDIP 16	80C	RECORDER	REL Q	-054C 071C	/ 0	
	DECADE	38	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03	
93L10	COUNTER	B-1	KVRDIP 16	80C	RECORDER	RELPR Q	-054C 071C	/ 0	
	DECADE	38	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03	
93L11	DECODER	B-1	KVRDIP 24	54C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	25	N.R.	75/75	GT	EQP OP	24CY 95X	1.13E 03	
93L12	MULTIPLEXER	B-1	KVRFPK 16	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	17	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	1.63E 04	
93L12	MULTIPLEXER	B-1	KVRFPK 16	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	17	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	2.07E 04	
93L12	MULTIPLEXER	B-1	KVRFPK 16	60C	NAVIGATE	REL Q	-054C 055C	/ 1	
	N.R.	17	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	1.13E 04	
93L12	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	17	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	7.15E 03	
93L12	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	17	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	9.04E 03	
93L12	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	17	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	4.95E 03	
93L14	LATCH	B-1	KVRFPK 16	61C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	30	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	4.08E 03	
93L14	LATCH	B-1	KVRFPK 16	61C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	30	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	5.16E 03	
93L14	LATCH	B-1	KVRFPK 16	61C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	30	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	2.83E 03	
93L14	LATCH	B-1	KVRFPK 16	77C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	30	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	2.04E 03	
93L14	LATCH	B-1	KVRFPK 16	77C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	30	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.58E 03	
93L14	LATCH	B-1	KVRFPK 16	77C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	30	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	1.41E 03	
93L14	LATCH	B-1	KVRDIP 16	56C	COMMUNIC	REL G	004C 051C	/ 0	
	N.R.	30	N.R.	75/75	GT	EQP OP	16CY 95X	7.57E 04	
93L14	LATCH	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	30	N.R.	75/75	GT	EQP OP	18CY 95X	2.55E 05	
93L14	LATCH	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	30	N.R.	75/75	GT	EQP OP	24CY 95X	8.93E 04	
93L16	COUNTER	B-1	KVRFPK 16	65C	NAVIGATE	REL Q	-054C 055C	/ 0	
	BINARY	58	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	1.02E 04	

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FAIRCHILD TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST	APPL.	TEST		PART		
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS		
93L16	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	65C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 141CY2.2G70X	/ 0 1.29E 04		
93L16	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	65C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 78CY 2.2G70X	/ 0 7.07E 03		
93L16	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	81C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 2.55E 04		
93L16	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	81C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 3.23E 04		
93L16	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	81C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 1.70E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 N.R.	 74/75	PROCESS AU	FIELD G N.A.	 	/ 0 1.71E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 N.R.	 72/74	RECORDER AU	FIELD Q N.A.	 	/ 0 8.54E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 N.R.	80C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 4.94E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 N.R.	80C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 1.67E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 NONE	60C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 1.47E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 NONE	60C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 9.37E 04		
93L16	COUNTER BINARY	B-1 58	KVRDIP 16 NONE	60C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 2.71E 04		
93L16	COUNTER BINARY	N.R. 58	KVRDIP 16 NONE	80C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G81X	/ 0 1.60E 03		
93L16	COUNTER BINARY	N.R. 58	KVRDIP 16 NONE	80C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 9.81E 04		
93L16	COUNTER BINARY	N.R. 58	KVRDIP 16 NONE	80C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 7.19E 04		
93L16	COUNTER BINARY	N.R. 58	KVRDIP 16 NONE	80C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 7.17E 03		
				76/77				/ 1	1/CATASTROPHIC	
								8.96E 03		

DIGITAL DEVICE DATA

FAIRCHILD TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE / PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED / #FAILED	REMARKS
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
93L16	COUNTER	N.R.	KVRDIP 16	80C	RADAR	REL Q	-054C 071C	/ 0	
	BINARY	58	NONE	76/76	AU	TCVPC	9CY 2.2G 81X	1.73E 03	
93L18	ENCODER	B-1	KVRFPK 16	64C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	24	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	5.11E 03	
93L18	ENCODER	B-1	KVRFPK 16	64C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	24	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	6.46E 03	
93L18	ENCODER	B-1	KVRFPK 16	64C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	24	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	3.53E 03	
93L18	ENCODER	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	24	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.02E 03	
93L18	ENCODER	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	24	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.29E 03	
93L18	ENCODER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0	
	N.R.	24	N.R.	74/75	AU	N.A.		1.71E 03	
93L18	ENCODER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0	
	N.R.	24	N.R.	72/74	AU	N.A.		8.54E 03	
93L18	ENCODER	B-1	KVRDIP 16	79C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	24	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03	
93L18	ENCODER	B-1	KVRDIP 16	79C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	24	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03	
93L22	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	19	N.R.	75/75	AU	TCVPC	114CY2.2G70X	1.63E 04	
93L22	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	19	N.R.	75/75	AU	TCVPC	141CY2.2G70X	2.07E 04	
93L22	MULTIPLEXER	B-1	KVRFPK 16	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	19	N.R.	75/75	AU	TCVPC	78CY 2.2G70X	1.06E 04	
93L22	MULTIPLEXER	B-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	N.R.	19	N.R.	72/74	AU	N.A.		4.16E 04	
93L22	MULTIPLEXER	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	N.R.	19	N.R.	74/75	AU	N.A.		3.08E 04	
93L22	MULTIPLEXER	B-1	KVRDIP 16	56C	COMMUNIC	REL G	004C 051C	/ 0	
	N.R.	19	N.R.	75/75	GT	EQP OP	16CY 95X	2.43E 04	
93L22	MULTIPLEXER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0	
	N.R.	19	N.R.	74/75	AU	N.A.		5.12E 03	
93L22	MULTIPLEXER	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	19	N.R.	75/75	GT	EQP OP	18CY 95X	1.30E 04	
93L22	MULTIPLEXER	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	19	N.R.	75/75	GT	EQP OP	24CY 95X	2.83E 03	
93L22	MULTIPLEXER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0	
	N.R.	19	N.R.	72/74	AU	N.A.		2.56E 04	
93L22	MULTIPLEXER	B-1	KVRDIP 16	75C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	19	N.R.	73/74	AU	TCVPC	411CY2.2G50X	1.48E 04	
93L22	MULTIPLEXER	B-1	KVRDIP 16	75C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	19	N.R.	75/76	AU	TCVPC	139CY2.2G50X	5.00E 03	
93L24	COMPARATOR	B-1	KVRFPK 16	61C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	27	N.R.	75/75	AI	TCVPC	114CY2.2G70X	1.02E 03	
93L24	COMPARATOR	B-1	KVRFPK 16	61C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	27	N.R.	75/75	AI	TCVPC	141CY2.2G70X	1.29E 03	
93L24	COMPARATOR	B-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	N.R.	27	N.R.	72/74	AU	N.A.		1.04E 04	
93L24	COMPARATOR	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	N.R.	27	N.R.	74/75	AU	N.A.		7.71E 03	

DIGITAL DEVICE DATA

FAIRCHILD TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP	TEST	APPL.	TEST		PART			
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS			
93L24	COMPARATOR	B-1	KVRDIP 16	56C	COMMUNIC	REL G	004C 051C	/ 0			
	N.R.	27	N.R.	75/75	1GT	EQP OP	16CY 95%	2.74E 04			
93L24	COMPARATOR	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0			
	N.R.	27	N.R.	74/75	1AU	N.A.		1.71E 03			
93L24	COMPARATOR	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	27	N.R.	75/75	1GT	EQP OP	18CY 95%	1.13E 04			
93L24	COMPARATOR	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	27	N.R.	75/75	1GT	EQP OP	24CY 95%	7.35E 03			
93L24	COMPARATOR	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0			
	N.R.	27	N.R.	72/74	1AU	N.A.		8.54E 03			
93L24	COMPARATOR	B-1	KVRDIP 16	76C	RECORDER	REL Q	-054C 071C	/ 0			
	N.R.	27	N.R.	73/74	1AU	TCVPC	411CY2.2G50%	4.94E 03			
93L24	COMPARATOR	B-1	KVRDIP 16	76C	RECORDER	RELPR Q	-054C 071C	/ 0			
	N.R.	27	N.R.	75/76	1AU	TCVPC	139CY2.2G50%	1.67E 03			
53L24	COMPARATOR	NONE	KVRFPK 16	91C	NA	LIFE V	085C	46/ 0			
	N.R.	27	N.R.	77/77	NA	OP DYN		4.60E 04			
						EM		46/ 1	1/DEGRADED		
								0.			
96L02	FLIPFLOP	B-1	KVRDIP 16	56C	COMMUNIC	REL G	004C 051C	/ 0			
	MONOSTABLE	18	N.R.	75/75	1GT	EQP OP	16CY 95%	2.32E 03			
96L02	FLIPFLOP	B-1	KVRDIP 16	56C	DISPLAY	REL G	004C 051C	/ 0			
	MONOSTABLE	18	N.R.	75/75	1GT	EQP OP	18CY 95%	1.64E 04			
9L00	GATE	B-1	KVRFPK 14	73C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	75/75	1AU	TCVPC	114CY2.2G70%	3.57E 04			
9L00	GATE	B-1	KVRFPK 14	73C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	75/75	1AU	TCVPC	141CY2.2G70%	4.52E 04			
9L00	GATE	B-1	KVRFPK 14	73C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	75/75	1AU	TCVPC	78CY 2.2G70%	2.47E 04			
9L04	INVERTER	B-1	KVRFPK 14	72C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	75/75	1AU	TCVPC	114CY2.2G70%	7.15E 03			
9L04	INVERTER	B-1	KVRFPK 14	72C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	75/75	1AU	TCVPC	141CY2.2G70%	9.04E 03			
9L04	INVERTER	B-1	KVRFPK 14	72C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	75/75	1AU	TCVPC	78CY 2.2G70%	4.95E 03			
9L24	FLIPFLOP	B-1	KVRFPK 16	59C	NAVIGATE	REL Q	-054C 055C	/ 0			
	JK	16	INORGANIC	75/75	1AI	TCVPC	114CY2.2G70%	2.04E 03			
9L24	FLIPFLOP	B-1	KVRFPK 16	59C	NAVIGATE	REL Q	-054C 055C	/ 0			
	JK	16	INORGANIC	75/75	1AI	TCVPC	141CY2.2G70%	2.58E 03			
9L24	FLIPFLOP	B-1	KVRFPK 16	59C	NAVIGATE	REL Q	-054C 055C	/ 0			
	JK	16	INORGANIC	75/75	1AI	TCVPC	78CY 2.2G70%	1.41E 03			
9L24	FLIPFLOP	B-1	KVRFPK 16	75C	NAVIGATE	REL Q	-054C 071C	/ 0			
	JK	16	INORGANIC	75/75	1AU	TCVPC	114CY2.2G70%	2.76E 04			
9L24	FLIPFLOP	B-1	KVRFPK 16	75C	NAVIGATE	REL Q	-054C 071C	/ 0			
	JK	16	INORGANIC	75/75	1AU	TCVPC	141CY2.2G70%	3.49E 04			
9L24	FLIPFLOP	B-1	KVRFPK 16	75C	NAVIGATE	REL Q	-054C 071C	/ 0			
	JK	16	INORGANIC	75/75	1AU	TCVPC	78CY 2.2G70%	1.91E 04			
9L24	FLIPFLOP	N.R.	KVRDIP 16	74C	RADAR	REL Q	-054C 071C	/ 0			
	JK	16	INORGANIC	76/77	1AU	TCVPC	6CY 2.2G 81%	1.00E 04			
9L24	FLIPFLOP	N.R.	KVRDIP 16	74C	RADAR	REL Q	-054C 071C	/ 0			
	JK	16	INORGANIC	76/77	1AU	TCVPC	7CY 2.2G 81%	3.25E 03			
9L24	FLIPFLOP	NONE	KVRDIP 16	43C	DISPLAY	FIELD U	040C 55%PWR	/ 3			
	JK	16	INORGANIC	75/77	1GBC	N.A.		1.21E 06			

DIGITAL DEVICE DATA

NATIONAL TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L00	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	135C 74/74	NA NA	LIFE V OP DYN	125C	58/ 0 2.90E 04		
						DYN EM		58/ 0 0.		
54L00	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	135C 75/75	NA NA	LIFE V OP DYN	125C	29/ 0 1.45E 04		
						DYN EM		29/ 0 0.		
54L00	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	135C 76/76	NA NA	LIFE V OP DYN	125C	25/ 0 1.25E 04		
						DYN EM		25/ 0 0.		
54L04	INVERTER N.R.	NONE 6	KVRDIP 14 INORGANIC	135C 74/74	NA NA	LIFE V OP DYN	125C	38/ 0 1.90E 04		
						DYN EM		38/ 0 0.		
54L04	INVERTER N.R.	NONE 6	KVRDIP 14 INORGANIC	135C 75/75	NA NA	LIFE V OP DYN	125C	15/ 0 7.50E 03		
						DYN EM		15/ 0 0.		
54L04	INVERTER N.R.	NONE 6	KVRDIP 14 INORGANIC	135C 76/76	NA NA	LIFE V OP DYN	125C	26/ 0 1.30E 04		
						DYN EM		26/ 0 0.		
54L10	GATE N.R.	NONE 3	KVRDIP 14 INORGANIC	135C 74/74	NA NA	LIFE V OP DYN	125C	61/ 0 3.05E 04		
						DYN EM		61/ 0 0.		
54L10	GATE N.R.	NONE 3	KVRDIP 14 INORGANIC	135C 75/75	NA NA	LIFE V OP DYN	125C	77/ 0 3.85E 04		
						DYN EM		77/ 0 0.		
54L10	GATE N.R.	NONE 3	KVRDIP 14 INORGANIC	135C 76/76	NA NA	LIFE V OP DYN	125C	16/ 0 8.00E 03		
						DYN EM		16/ 0 1.00E 00		

DIGITAL DEVICE DATA

NATIONAL TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L20	GATE	NONE	KVRDIP 14	135C	NA	LIFE V	125C	71/ 0		
	N.R.	2	INORGANIC	74/74	NA	OP DYN		3.55E 04		
						DYN EM		71/ 0		
								0.		
54L20	GATE	NONE	KVRDIP 14	135C	NA	LIFE V	125C	7/ 0		
	N.R.	2	INORGANIC	75/75	NA	OP DYN		3.50E 03		
						DYN EM		7/ 0		
								0.		
54L20	GATE	NONE	KVRDIP 14	135C	NA	LIFE V	125C	9/ 0		
	N.R.	2	INORGANIC	76/76	NA	OP DYN		4.50E 03		
						DYN EM		9/ 0		
								0.		
54L73	FLIPFLOP JK	NONE	KVRDIP 14	135C	NA	LIFE V	125C	33/ 0		
		14	INORGANIC	74/74	NA	OP DYN		1.65E 04		
						DYN EM		33/ 0		
								0.		
54L73	FLIPFLOP JK	NONE	KVRDIP 14	135C	NA	LIFE V	125C	77/ 0		
		14	INORGANIC	75/75	NA	OP DYN		3.85E 04		
						DYN EM		77/ 0		
								0.		
54L73	FLIPFLOP JK	NONE	KVRDIP 14	135C	NA	LIFE V	125C	7/ 0		
		14	INORGANIC	76/76	NA	OP DYN		3.50E 03		
						DYN EM		7/ 1		
								0.		
54L73	FLIPFLOP JK	NONE	KVRDIP 14	135C	NA	LIFE V	125C	10/ 0		
		14	INORGANIC	76/76	NA	OP DYN		5.00E 03		
						DYN EM		10/ 0		
								0.		
54L74	FLIPFLOP D	NONE	KVRDIP 14	135C	NA	LIFE V	125C	93/ 0		
		12	INORGANIC	74/74	NA	OP DYN		4.65E 04		
						DYN EM		93/ 1	1/DEGRADED	
								0.		
54L74	FLIPFLOP D	NONE	KVRDIP 14	135C	NA	LIFE V	125C	33/ 0		
		12	INORGANIC	75/75	NA	OP DYN		1.65E 04		
						DYN EM		33/ 0		
								0.		

DIGITAL DEVICE DATA

NATIONAL
TTL, LOW POWERMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54L74	FLIPFLOP D	NONE 12	KVRDIP 14 INORGANIC	135C 76/76	NA	LIFE V OP DYN	125C	23/ 0 1.15E 04	
						DYN EM		23/ 1 0.	1/DEGRADED
54L86	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	135C 74/74	NA	LIFE V OP DYN	125C	3/ 0 1.50E 03	
						DYN EM		3/ 0 0.	
54L86	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	135C 75/75	NA	LIFE V OP DYN	125C	10/ 0 5.00E 03	
						DYN EM		10/ 2 0.	2/DEGRADED
54L86	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	135C 76/76	NA	LIFE V OP DYN	125C	5/ 0 2.50E 03	
						DYN EM		5/ 0 0.	
54L93	COUNTER BINARY	B-1 33	KVRDIP 14 N.R.	51C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.26E 03	
54L93	COUNTER BINARY	B-1 33	KVRDIP 14 N.R.	51C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.65E 03	
54L95	SHIFT REG N.R.	NONE 37	KVRDIP 14 INORGANIC	150C 74/74	NA	LIFE V OP DYN	125C	13/ 0 6.50E 03	
						DYN EM		13/ 0 0.	
54L95	SHIFT REG N.R.	NONE 37	KVRDIP 14 INORGANIC	150C 74/74	NA	LIFE V OP DYN	125C	8/ 0 4.00E 03	
						DYN EM		8/ 1 0.	1/DEGRADED
54L95	SHIFT REG N.R.	NONE 37	KVRDIP 14 INORGANIC	150C 75/75	NA	LIFE V OP DYN	125C	23/ 0 1.15E 04	
						DYN EM		23/ 1 0.	1/DEGRADED
54L95	SHIFT REG N.R.	NONE 37	KVRDIP 14 INORGANIC	150C 76/76	NA	LIFE V OP DYN	125C	17/ 0 8.50E 03	
						DYN EM		17/ 0 0.	
70L00	GATE N.R.	A-1 4	SNFPK 14 N.R.	35C 73/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 3.06E 05	

DIGITAL DEVICE DATA

NATIONAL TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
170L10	GATE	A-1	SNFFK 14	35C	ICOMB/NOC	FIELD U	025C	/ 0		
	N.R.	3	N.R.	73/74	SF	N.A.		4.08E 04		
170L20	GATE	A-1	SNFFK 14	35C	ICOMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	N.R.	73/74	SF	N.A.		1.53E 05		
170L30	GATE	A-1	SNFFK 14	35C	ICOMB/NOC	FIELD U	025C	/ 0		
	N.R.	1	N.R.	73/74	SF	N.A.		7.14E 04		
174L74	FLIPFLOP	NONE	KADIP 14	85C	NA	LIVE U	085C 85XRM	50/ 3		
	D	12	INORGANIC	77/77	NA	HUMLIFE		4.82E 04		
						FNCT EM	025C	47/ 1		
								0.		
174L74	FLIPFLOP	NONE	KADIP 14	85C	NA	LIVE U	085C 85XRM	50/ 3		
	D	12	INORGANIC	77/77	NA	HUMLIFE		4.85E 04		
						FNCT EM	025C	47/ 1		
								0.		
174L74	FLIPFLOP	NONE	KADIP 14	85C	NA	LIVE U	085C 85XRM	50/ 2		
	D	12	INORGANIC	77/77	NA	HUMLIFE		4.90E 04		
						FNCT EM	025C	48/ 1		
								0.		
174L74	FLIPFLOP	NONE	KADIP 14	41C	DISPLAY	FIELD U	040C 55XPMR	/152		
	D	12	INORGANIC	75/77	GBC	N.A.		1.98E 08		
175L51	FLIPFLOP	B-1	KVRDIP 16	53C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	45	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.30E 04		
175L51	FLIPFLOP	B-1	KVRDIP 16	53C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	45	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.70E 04		
175L51	FLIPFLOP	B-1	SNDIP 16	50C	DISPLAY	FIELD Q	025C	/ 0		
	D	45	INORGANIC	75/76	GT	N.A.		1.73E 05		
175L51	FLIPFLOP	B-1	SNDIP 16	29C	DISPLAY	REL G	004C 051C	/ 0		
	D	45	INORGANIC	75/75	GT	EQP OP	18CY 95X	5.04E 03		
175L51	FLIPFLOP	N.R.	KVRDIP 16	58C	RADAR	RELPR Q	-054C 055C	/ 0		
	D	45	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	8.40E 03		
175L73	FLIPFLOP	A-1	SNFFK 14	35C	ICOMB/NOC	FIELD N	025C	/ 0		
	JK	20	N.R.	73/74	SF	N.A.		1.94E 05		

SIGNETICS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
174LS04	INVERTER	NONE	KVRDIP 14	300C	NA	LIVE V	300C	60/ 0		
	N.R.	6	N.R.	74/74	NA	STGLIFE		4.65E 04		
						EM		60/ 1	1/CATASTROPHIC	
								0.	WIRE BOND	

DIGITAL DEVICE DATA

T.I. TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP GATES	TEST PROTECT.	TEST DATE	TEST ENV.		PART HOURS	
154L00	GATE N.R.	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0	
		4	INORGANIC	72/74	SF	N.A.		9.33E 04	
154L00	GATE N.R.	A-1	KVRDIP 14	25C	COMB/NOC	FIELD U	025C	/ 0	
		4	INORGANIC	72/74	SF	N.A.		1.39E 05	
154L00	GATE N.R.	A-1	SNFFK 14	26C	COMB/NOC	FIELD U	025C	/ 0	
		4	INORGANIC	72/74	SF	N.A.		1.13E 06	
154L00	GATE N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		4	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	6.13E 03	
154L00	GATE N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		4	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	7.75E 03	
154L00	GATE N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		4	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	4.24E 03	
154L00	GATE N.R.	B-2	EADIP 14	25C	PROCESS	REL Q	025C	/ 0	
		4	INORGANIC	74/74	GBC	EQP OP		3.48E 03	
154L02	GATE N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		4	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	5.11E 03	
154L02	GATE N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		4	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	6.46E 03	
154L02	GATE N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		4	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	3.53E 03	
154L04	INVERTER N.R.	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0	
		6	INORGANIC	72/74	SF	N.A.		3.11E 04	
154L04	INVERTER N.R.	A-1	KVRDIP 14	33C	COMB/NOC	FIELD U	025C	/ 0	
		6	INORGANIC	72/74	SF	N.A.		1.70E 05	
154L04	INVERTER N.R.	A-1	SNFFK 14	26C	COMB/NOC	FIELD U	025C	/ 0	
		6	INORGANIC	72/74	SF	N.A.		7.77E 05	
154L04	INVERTER N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		6	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	9.19E 03	
154L04	INVERTER N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		6	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	1.16E 04	
154L04	INVERTER N.R.	JB	KVRFFK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
		6	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	6.36E 03	
154L04	INVERTER N.R.	JB	SNFFK 14	72C	RADAR	REL Q	-054C 071C	/ 0	
		6	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	3.37E 03	
154L04	INVERTER N.R.	JB	SNFFK 14	72C	RADAR	REL Q	-054C 071C	/ 0	
		6	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	3.96E 03	
154L04	INVERTER N.R.	B-2	EADIP 14	26C	PROCESS	REL Q	025C	/ 0	
		6	INORGANIC	74/74	GBC	EQP OP		6.95E 03	
154L10	GATE N.R.	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0	
		3	INORGANIC	72/74	SF	N.A.		3.11E 04	
154L10	GATE N.R.	A-1	SNFFK 14	25C	COMB/NOC	FIELD U	025C	/ 0	
		3	INORGANIC	72/74	SF	N.A.		3.57E 05	
154L10	GATE N.R.	JB	KVRFFK 14	55C	NAVIGATE	REL Q	-054C 055C	/ 0	
		3	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	2.04E 03	
154L10	GATE N.R.	JB	KVRFFK 14	55C	NAVIGATE	REL Q	-054C 055C	/ 0	
		3	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	2.58E 03	
154L10	GATE N.R.	JB	KVRFFK 14	55C	NAVIGATE	REL Q	-054C 055C	/ 0	
		3	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	1.41E 03	
154L10	GATE N.R.	B-2	EADIP 14	25C	PROCESS	REL Q	025C	/ 0	
		3	INORGANIC	74/74	GBC	EQP OP		3.48E 03	

DIGITAL DEVICE DATA

T.I. TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST	APPL.	TEST		PART		
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS		
54L153	MULTIPLEXER	B-1	KVRDIP 16	57C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	16	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	6.72E 03		
54L153	MULTIPLEXER	B-1	KVRDIP 16	57C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	16	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	8.78E 03		
54L164	SHIFT REG	JB	KVRFPK 14	66C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	36	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	3.06E 04		
54L164	SHIFT REG	JB	KVRFPK 14	66C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	36	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	3.87E 04		
54L164	SHIFT REG	JB	KVRFPK 14	66C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	36	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	2.12E 04		
54L164	SHIFT REG	B-1	KVRDIP 14	65C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	36	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.39E 04		
54L164	SHIFT REG	B-1	KVRDIP 14	65C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	36	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	1.81E 04		
54L20	GATE	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		1.56E 04		
54L20	GATE	A-1	KVRDIP 14	25C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		1.56E 04		
54L20	GATE	A-1	SNFPK 14	25C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		2.33E 05		
54L20	GATE	JB	KVRFPK 14	71C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	2.04E 03		
54L20	GATE	JB	KVRFPK 14	71C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.58E 03		
54L20	GATE	JB	KVRFPK 14	71C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	1.41E 03		
54L20	GATE	B-2	EADIP 14	25C	PROCESS	REL Q	025C	/ 0		
	N.R.	2	INORGANIC	74/74	GBC	EQP OP		6.95E 03		
54L30	GATE	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	1	INORGANIC	72/74	SF	N.A.		4.67E 04		
54L30	GATE	A-1	SNFPK 14	25C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	1	INORGANIC	72/74	SF	N.A.		3.96E 05		
54L30	GATE	B-2	EADIP 14	25C	PROCESS	REL Q	025C	/ 0		
	N.R.	1	INORGANIC	74/74	GBC	EQP OP		1.74E 03		
54L42	DECODER	B-1	KVRDIP 16	61C	DIG PROC	REL Q	-054C 050C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	3.92E 03		
54L42	DECODER	B-1	KVRDIP 16	61C	DIG PROC	REL Q	-054C 050C	/ 0		
	BCD/DECIMAL	18	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	5.12E 03		
54L51	GATE	A-1	SNFPK 14	25C	COMB/NOC	FIELD U	025C	/ 0		
	N.R.	6	INORGANIC	73/74	SF	N.A.		9.18E 04		
54L72	FLIPFLOP	A-1	SNFPK 14	26C	COMB/NOC	FIELD U	025C	/ 0		
	JK	8	INORGANIC	72/74	SF	N.A.		1.80E 05		
54L73	FLIPFLOP	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	JK	14	INORGANIC	72/74	SF	N.A.		1.55E 05		
54L73	FLIPFLOP	A-1	SNFPK 14	26C	COMB/NOC	FIELD U	025C	/ 0		
	JK	14	INORGANIC	72/74	SF	N.A.		1.30E 06		
54L73	FLIPFLOP	B-1	KVRDIP 16		NAVIGATE	FIELD Q		/ 0		
	JK	14	INORGANIC	72/74	AI	N.A.		1.29E 03		
54L73	FLIPFLOP	N.R.	KVRDIP 16	72C	RADAR	REL Q	-054C 071C	/ 0		
	JK	14	INORGANIC	73/76	AU	TCVPC	10CY 2.2G81X	1.60E 03		

DIGITAL DEVICE DATA

T.I. TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L73	FLIPFLOP JK	N.R. 14	KVRDIP 16 INORGANIC	72C 76/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 4.13E 04		
54L73	FLIPFLOP JK	N.R. 14	KVRDIP 16 INORGANIC	72C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 5.90E 04		
54L73	FLIPFLOP JK	N.R. 14	KVRDIP 16 INORGANIC	72C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 1.25E 04		
54L73	FLIPFLOP JK	N.R. 14	KVRDIP 16 INORGANIC	72C 73/76	RADAR AU	REL Q TCVPC	-054C 071C ALQ-126	/ 0 1.67E 04		
54L74	FLIPFLOP D	A-1 12	KVRDIP 14 INORGANIC	26C 72/74	COMB/NOC SF	FIELD U N.A.	023C	/ 0 6.22E 04		
54L86	GATE N.R.	B-1 4	SNFPPK 14 INORGANIC	72/74	RADAR AU	FIELD Q N.A.		/ 0 3.21E 03		
54L86	GATE N.R.	B-1 4	SNFPPK 14 INORGANIC	74/75	RADAR AIU	FIELD G N.A.		/ 0 3.86E 03		
54L91	SHIFT REG N.R.	A-1 67	SNFPPK 14 INORGANIC	27C 73/74	COMB/NOC SF	FIELD U N.A.	023C	/ 0 5.10E 04		
54L95	SHIFT REG N.R.	A-1 37	SNFPPK 14 INORGANIC	27C 72/74	COMB/NOC SF	FIELD U N.A.	023C	/ 0 1.57E 06		
54L98	MULTIPLEXER LATCH	B-1 51	KVRDIP 16 INORGANIC	72/74	RADAR AU	FIELD Q N.A.		/ 0 1.56E 04		
54L98	MULTIPLEXER LATCH	B-1 51	KVRDIP 16 INORGANIC	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.16E 04		
74L04	INVERTER N.R.	NONE 6	EADIP 14 INORGANIC	75/76	NA	LIFE V OP CNST		55/ 2 5.37E 04		
						STAT EM	023C	53/ 0 0.		
74L04	INVERTER N.R.	NONE 6	EADIP 14 INORGANIC	86C 75/76	NA	LIFE V RHOC	085C 85XRH	40/ 0 2.02E 04		
						STAT EM	023C	40/ 0 0.		
74L47	INTERFACE DECODE/DRIVER	NONE 19	EADIP 16 INORGANIC	54C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 7 1.74E 07		
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 1 4.95E 04		
						FNCT EM	023C	49/ 21 0.		
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 7 4.65E 04		
						FNCT EM	023C	43/ 40 0.		
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 0 5.00E 04		
						FNCT EM	023C	50/ 43 0.		
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	100/ 8 9.40E 04		
						FNCT EM	023C	192/ 50 0.		

DIGITAL DEVICE DATA

T.I. TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 2 4.90E 04	
						FNCT EM	025C	48/ 17 0.	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 4 0.	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	100/ 12 9.40E 04	
						FNCT EM	025C	88/ 83 0.	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 3 4.82E 04	
						FNCT EM	025C	47/ 19 0.	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 2 4.87E 04	
						FNCT EM	025C	48/ 0 0.	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 3 4.82E 04	
						FNCT EM	025C	47/ 0 0.	
74L74	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA	LIFE U HUMLIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 0 0.	

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L00	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AIU	N.A.		3.12E 04		
54L00	GATE	JB	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	4	N.R.	74/75	AIU	N.A.		2.31E 04		
54L00	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	4	N.R.	75/76	GT	N.A.		4.36E 05		
54L00	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	16CY 95X	4.60E 04		
54L00	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	4	N.R.	75/76	GT	N.A.		3.20E 05		
54L00	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	18CY 95X	2.10E 04		
54L00	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	24CY 95X	1.02E 04		
54L00	GATE	JB	DIP 14	35C	CONTROL	REL Q	025C	/ 0		
	N.R.	4	N.R.	76/76	MGB	EQP OP		5.18E 03		
54L00	GATE	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0		
	N.R.	4	N.R.	76/77	MGB	EQP OP		4.46E 04		
54L00	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
54L00	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		
54L00	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.39E 04		
54L00	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.43E 04		
54L00	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	5.85E 03		
54L00	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	2.73E 04		
54L00	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	73/74	AIU	TCVPC	62CY 1.6G62X	2.48E 03		
54L02	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	4	N.R.	75/76	GT	N.A.		1.47E 05		
54L02	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	16CY 95X	1.24E 04		
54L02	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	4	N.R.	75/76	GT	N.A.		2.90E 04		
54L02	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	24CY 95X	4.52E 03		
54L02	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	2.00E 04		
54L02	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.62E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L03	GATE	JB	KVRDIP 14	74/75	PROCESS	FIELD G		/ 0		
	N.R.	4	N.R.		AU	N.A.		3.42E 03		
54L03	GATE	JB	KVRDIP 14	72/74	RECORDER	FIELD Q		/ 0		
	N.R.	4	N.R.		AU	N.A.		1.71E 04		
54L03	GATE	JB	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50%	9.87E 03		
54L03	GATE	JB	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50%	3.33E 03		
54L04	INVERTER	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.		6.52E 05		
54L04	INVERTER	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	6	N.R.	75/75	GT	EQP OP	16CY 95%	5.56E 04		
54L04	INVERTER	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.		6.20E 05		
54L04	INVERTER	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	N.R.	75/75	GT	EQP OP	18CY 95%	3.78E 04		
54L04	INVERTER	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	N.R.	75/75	GT	EQP OP	24CY 95%	1.70E 04		
54L04	INVERTER	JB	DIP 14	35C	CONTROL	REL Q	025C	/ 0		
	N.R.	6	N.R.	76/76	MGB	EQP OP		1.73E 03		
54L04	INVERTER	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0		
	N.R.	6	N.R.	76/77	MGB	EQP OP		1.49E 04		
54L04	INVERTER	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	117CY1.6G62%	1.17E 03		
54L04	INVERTER	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AIU	TCVPC	545CY1.6G62%	5.45E 03		
54L04	INVERTER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	N.R.	75/75	AI	TCVPC	13CY1.3G 62%	2.67E 04		
54L04	INVERTER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	N.R.	75/75	AI	TCVPC	17CY1.3G 62%	3.50E 04		
54L04	INVERTER	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	117CY1.6G62%	3.51E 03		
54L04	INVERTER	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AIU	TCVPC	545CY1.6G62%	1.64E 04		
54L04	INVERTER	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	73/74	AIU	TCVPC	62CY 1.6G62%	1.86E 03		
54L10	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AU	N.A.		2.34E 04		
54L10	GATE	JB	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	3	N.R.	74/75	AIU	N.A.		1.74E 04		
54L10	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	3	N.R.	75/76	GT	N.A.		2.82E 05		
54L10	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	3	N.R.	75/75	GT	EQP OP	15CY 95%	3.36E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCP CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
:54L10	: GATE	: JB	: DIP 14	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 75/76	: GT	: N.A.		: 3.63E 04		
:54L10	: GATE	: JB	: DIP 14	: 61C	: DISPLAY	: REL G	: 004C 051C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 75/75	: GT	: EQP OP	: 24CY 95%	: 5.66E 03		
:54L10	: GATE	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62%	: 1.18E 04		
:54L10	: GATE	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62%	: 1.54E 04		
:54L10	: GATE	: B-1	: KVRDIP 14	: 81C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 74/74	: AIU	: TCVPC	: 117CY1.6G62%	: 3.51E 03		
:54L10	: GATE	: B-1	: KVRDIP 14	: 81C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 74/75	: AIU	: TCVPC	: 545CY1.6G62%	: 1.64E 04		
:54L10	: GATE	: B-1	: KVRDIP 14	: 81C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
: N.R.	: N.R.	: 3	: N.R.	: 73/74	: AIU	: TCVPC	: 62CY 1.6G62%	: 1.86E 03		
:54L122	: FLIPFLOP	: B-1	: DIP 14	: 35C	: CONTROL	: REL Q	: 025C	: / 0		
: MONOSTABLE	: MONOSTABLE	: 10	: N.R.	: 76/76	: MGB	: EQP OP		: 1.15E 03		
:54L122	: FLIPFLOP	: B-1	: DIP 14	: 35C	: CONTROL	: RELPR Q	: 025C	: / 0		
: MONOSTABLE	: MONOSTABLE	: 10	: N.R.	: /77	: MGB	: EQP OP		: 9.90E 03		
:54L20	: GATE	: JB	: FPK 14	:	: RADAR	: FIELD Q		: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 72/74	: AU	: N.A.		: 1.82E 04		
:54L20	: GATE	: JB	: FPK 14	:	: RADAR	: FIELD G		: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 74/75	: AIU	: N.A.		: 1.35E 04		
:54L20	: GATE	: JB	: DIP 14	: 35C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 75/76	: GT	: N.A.		: 2.23E 05		
:54L20	: GATE	: JB	: DIP 14	: 61C	: COMMUNIC	: REL G	: 004C 051C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 75/75	: GT	: EQP OP	: 16CY 95%	: 2.36E 04		
:54L20	: GATE	: JB	: DIP 14	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 75/76	: GT	: N.A.		: 2.18E 04		
:54L20	: GATE	: JB	: DIP 14	: 61C	: DISPLAY	: REL G	: 004C 051C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 75/75	: GT	: EQP OP	: 24CY 95%	: 3.39E 03		
:54L20	: GATE	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62%	: 3.92E 03		
:54L20	: GATE	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62%	: 5.12E 03		
:54L20	: GATE	: B-1	: KVRDIP 14	: 81C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 74/74	: AIU	: TCVPC	: 117CY1.6G62%	: 2.34E 03		
:54L20	: GATE	: B-1	: KVRDIP 14	: 81C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
: N.R.	: N.R.	: 2	: N.R.	: 74/75	: AIU	: TCVPC	: 545CY1.6G62%	: 1.09E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54L20	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	2	N.R.	73/74	AIU	TCVPC	62CY 1.6G62X	1.24E 03	
54L30	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	1	N.R.	72/74	AIU	N.A.		2.34E 04	
54L30	GATE	JB	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	1	N.R.	74/75	AIU	N.A.		1.74E 04	
54L30	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	1	N.R.	75/76	GT	N.A.		9.89E 04	
54L30	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0	
	N.R.	1	N.R.	75/75	GT	EQP OP	16CY 95X	1.24E 04	
54L30	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	N.R.	1	N.R.	75/76	GT	N.A.		4.22E 04	
54L30	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	1	N.R.	75/75	GT	EQP OP	18CY 95X	1.68E 03	
54L30	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	1	N.R.	75/75	GT	EQP OP	24CY 95X	3.39E 03	
54L30	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	1	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03	
54L30	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	1	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03	
54L30	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	1	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	8.54E 03	
54L30	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	1	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.12E 04	
54L51	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	6	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.30E 04	
54L51	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	6	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.70E 04	
54L51	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 04	
54L51	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 04	
54L51	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/74	AIU	TCVPC	62CY 1.6G62X	6.20E 03	
54L72	FLIPFLOP	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	JK	8	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	2.34E 03	
54L72	FLIPFLOP	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	JK	8	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	1.09E 04	
54L72	FLIPFLOP	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	JK	8	N.R.	73/74	AIU	TCVPC	62CY 1.6G62X	1.24E 03	

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L73	FLIPFLOP	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	14	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
54L73	FLIPFLOP	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	14	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		
54L73	FLIPFLOP	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	JK	14	N.R.	75/76	AI	TCVPC	835CY1.6G62X	1.38E 05		
54L73	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	14	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.32E 04		
54L73	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	14	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.34E 04		
54L73	FLIPFLOP	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	14	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
54L73	FLIPFLOP	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	14	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		
54L74	FLIPFLOP	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	JK	12	N.R.	75/76	GT	N.A.		3.92E 05		
54L74	FLIPFLOP	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	JK	12	N.R.	75/75	GT	EQP OP	16CY 95X	5.06E 04		
54L74	FLIPFLOP	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	JK	12	N.R.	75/76	GT	N.A.		1.13E 05		
54L74	FLIPFLOP	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	JK	12	N.R.	75/75	GT	EQP OP	18CY 95X	2.94E 03		
54L74	FLIPFLOP	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	JK	12	N.R.	75/75	GT	EQP OP	24CY 95X	9.05E 03		
54L74	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	12	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.62E 04		
54L74	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	12	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.12E 04		
54L78	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	16	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	6.30E 03		
54L78	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	JK	16	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	8.24E 03		
54L85	COMPARATOR	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	33	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.32E 04		
54L85	COMPARATOR	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	33	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.72E 04		
54L86	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	9.66E 03		
54L86	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.26E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
:54L91	: SHIFT REG	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
:	: N.R.	:	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62X	: 7.56E 03		
:54L91	: SHIFT REG	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
:	: N.R.	:	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62X	: 9.88E 03		
:54L93	: COUNTER	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
:	: BINARY	: 25	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62X	: 9.80E 03		
:54L93	: COUNTER	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
:	: BINARY	: 25	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62X	: 1.28E 04		
:54L95	: SHIFT REG	: JB	: DIP 14	: 50C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 37	: N.R.	: 75/76	: GT	: N.A.		: 3.30E 04		
:54L95	: SHIFT REG	: JB	: DIP 14	: 29C	: COMMUNIC	: REL G	: 004C 051C	: / 0		
:	: N.R.	: 37	: N.R.	: 75/75	: GT	: EQP OP	: 16CY 95X	: 4.25E 03		
:54L95	: SHIFT REG	: JB	: DIP 14	: 50C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 37	: N.R.	: 75/76	: GT	: N.A.		: 7.26E 03		
:54L95	: SHIFT REG	: JB	: DIP 14	: 29C	: DISPLAY	: REL G	: 004C 051C	: / 0		
:	: N.R.	: 37	: N.R.	: 75/75	: GT	: EQP OP	: 24CY 95X	: 1.13E 03		
:54L95	: SHIFT REG	: B-1	: KVRDIP 14	: 75C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
:	: N.R.	: 37	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62X	: 2.30E 04		
:54L95	: SHIFT REG	: B-1	: KVRDIP 14	: 75C	: DIG PROC	: REL Q	: -054C 050C	: / 0		
:	: N.R.	: 37	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62X	: 3.00E 04		
:54L95	: SHIFT REG	: B-1	: KVRDIP 14	: 96C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
:	: N.R.	: 37	: N.R.	: 74/74	: AIU	: TCVPC	: 117CY1.6G62X	: 1.40E 04		
:54L95	: SHIFT REG	: B-1	: KVRDIP 14	: 96C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
:	: N.R.	: 37	: N.R.	: 74/75	: AIU	: TCVPC	: 545CY1.6G62X	: 6.54E 04		
:54L95	: SHIFT REG	: B-1	: KVRDIP 14	: 96C	: NAVIGATE	: REL Q	: -054C 071C	: / 0		
:	: N.R.	: 37	: N.R.	: 73/74	: AIU	: TCVPC	: 62CY 1.6G62X	: 7.44E 03		
:93L01	: DECODER	: B-1	: DIP 16	: 35C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: BCD/DECIMAL	: 18	: N.R.	: 75/76	: GT	: N.A.		: 3.30E 04		
:93L01	: DECODER	: B-1	: DIP 16	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: BCD/DECIMAL	: 18	: N.R.	: 75/76	: GT	: N.A.		: 3.29E 05		
:93L14	: LATCH	: B-1	: DIP 16	: 35C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 30	: N.R.	: 75/76	: GT	: N.A.		: 4.62E 05		
:93L14	: LATCH	: B-1	: DIP 16	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 30	: N.R.	: 75/76	: GT	: N.A.		: 1.09E 06		
:93L16	: COUNTER	: B-1	: DIP 16	: 50C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: BINARY	: 58	: N.R.	: 75/76	: GT	: N.A.		: 2.42E 05		
:93L16	: COUNTER	: B-1	: DIP 16	: 50C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: BINARY	: 58	: N.R.	: 75/76	: GT	: N.A.		: 1.37E 06		
:93L22	: MULTIPLEXER	: B-1	: DIP 16	: 35C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 19	: N.R.	: 75/76	: GT	: N.A.		: 2.14E 05		
:93L22	: MULTIPLEXER	: B-1	: DIP 16	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 19	: N.R.	: 75/76	: GT	: N.A.		: 2.57E 05		
:93L24	: COMPARATOR	: B-1	: DIP 16	: 35C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 27	: N.R.	: 75/76	: GT	: N.A.		: 2.97E 05		
:93L24	: COMPARATOR	: B-1	: DIP 16	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: N.R.	: 27	: N.R.	: 75/76	: GT	: N.A.		: 1.42E 05		
:96L02	: FLIPFLOP	: B-1	: DIP 16	: 35C	: COMMUNIC	: FIELD Q	: 025C	: / 0		
:	: MONOSTABLE	: 14	: N.R.	: 75/76	: GT	: N.A.		: 1.00E 04		
:96L02	: FLIPFLOP	: B-1	: DIP 16	: 35C	: DISPLAY	: FIELD Q	: 025C	: / 0		
:	: MONOSTABLE	: 14	: N.R.	: 75/76	: GT	: N.A.		: 3.94E 05		

DIGITAL DEVICE DATA

FAIRCHILD TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
93816	COUNTER	B-1	KVRDIP 16	45C	DISPLAY	REL G	004C 051C	/ 0	
	BINARY	54	N.R.	75/75	GT	EQP OP	18CY 95X	1.26E 03	

INTEL TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
3205	DECODER	B-1	AUDIP 16	50C	COMMUNIC	FIELD Q	025C	/ 0	
	BINARY		INORGANIC	75/76	GT	N.A.		6.59E 04	
3205	DECODER	B-1	AUDIP 16	29C	COMMUNIC	REL G	004C 051C	/ 0	
	BINARY		INORGANIC	75/75	GT	EQP OP	16CY 95X	5.41E 03	
3205	DECODER	B-1	AUDIP 16	50C	DISPLAY	FIELD Q	025C	/ 0	
	BINARY		INORGANIC	75/76	GT	N.A.		3.78E 05	
3205	DECODER	B-1	AUDIP 16	29C	DISPLAY	REL G	004C 051C	/ 0	
	BINARY		INORGANIC	75/75	GT	EQP OP	18CY 95X	3.91E 04	
3205	DECODER	B-1	AUDIP 16	29C	DISPLAY	REL G	004C 051C	/ 0	
	BINARY		INORGANIC	75/75	GT	EQP OP	24CY 95X	9.05E 03	
3205	DECODER	NONE	AUDIP 16	160C	NA	LIFE V	160C	25/ 0	
	BINARY		INORGANIC	/ 74	NA	STGLIFE		2.50E 04	
						SDF EM		25/ 0	
								0.	
3205	DECODER	NONE	AUDIP 16	150C	NA	LIFE V	125C 100X	25/ 1	1/SHORT
	BINARY		INORGANIC	/ 74	NA	OP DYN		2.50E 04	
3205	DECODER	NONE	SDIP 16	35C	INTERFACE	CHECK G	025C	/ 0	
	BINARY		INORGANIC	77/77	GBC	EQP OP		4.40E 03	
3404	LATCH	NONE	SDIP 16	35C	INTERFACE	CHECK G	025C	/ 0	
	N.R.		INORGANIC	77/77	GBC	EQP OP		2.64E 03	

SIGNETICS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54LS109	FLIPFLOP	N.R.	KVRDIP 16	73C	RADAR	REL Q	-054C 071C	/ 0	
	JK	16	INORGANIC	76/77	AU	TCVPC	6CY 2.2G 81X	1.00E 04	
54LS109	FLIPFLOP	N.R.	KVRDIP 16	73C	RADAR	REL Q	-054C 071C	/ 0	
	JK	16	INORGANIC	76/77	AU	TCVPC	7CY 2.2G 81X	3.25E 03	
74S00	GATE	NONE	KVRDIP 14	130C	NA	LIFE V	125C	45/ 0	
	N.R.	4	N.R.	74/74	NA	OP DYN		4.50E 04	
						EM		45/ 0	
								0.	
74S10	GATE	NONE	KVRDIP 14	131C	NA	LIFE V	125C	45/ 0	
	N.R.	3	N.R.	74/74	NA	OP DYN		4.50E 04	
						EM		45/ 0	
								0.	

DIGITAL DEVICE DATA

T.I. TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
34S00	GATE	B-1	KVRFPK 14	35C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	4	INORGANIC	73/75	AI	EQP OP		3.62E 07		
34S00	GATE	B-1	KVRFPK 14	64C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	4	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	5.84E 05		
34S00	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	4	INORGANIC	72/74	AIU	N.A.		5.27E 05		
34S00	GATE	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	4	INORGANIC	74/75	AIU	N.A.		1.88E 04		
34S00	GATE	B-1	KVRDIP 14	58C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	INORGANIC	75/75	GT	EQP OP	18CY 95X	3.78E 04		
34S00	GATE	B-1	KVRDIP 14	58C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	INORGANIC	75/75	GT	EQP OP	24CY 95X	2.26E 03		
34S00	GATE	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	4	INORGANIC	76/76	GF	N.A.		4.47E 03		
34S00	GATE	N.R.	KVRDIP 14	78C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	73/77	AU	TCVPC	6CY 2.2G 81X	1.84E 04		
34S00	GATE	N.R.	KVRDIP 14	78C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	73/77	AU	TCVPC	7CY 2.7G 81X	2.62E 04		
34S00	GATE	N.R.	KVRDIP 14	78C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	73/76	AU	TCVPC	8CY 2.2G 81X	4.4E 03		
34S04	INVERTER	B1/JB	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	6	INORGANIC	76/76	GF	N.A.		2.88E 03		
34S04	INVERTER	B-1	KVRFPK 14	40C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP		5.84E 07		
34S04	INVERTER	B-1	KVRFPK 14	69C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	7.83E 05		
34S04	INVERTER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.05E 05		
34S04	INVERTER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	1.37E 05		
34S04	INVERTER	B-1	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	18CY 95X	3.86E 04		
34S04	INVERTER	B-1	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	24CY 95X	2.26E 03		
34S10	GATE	B-1	KVRFPK 14	32C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	3	INORGANIC	73/75	AI	EQP OP		1.62E 07		
34S10	GATE	B-1	KVRFPK 14	61C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	3	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	2.61E 05		
34S10	GATE	B-1	KVRDIP 14	56C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	3	INORGANIC	75/75	GT	EQP OP	16CY 95X	2.71E 03		
34S10	GATE	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	3	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	4.09E 04		
34S10	GATE	B-1	KVRDIP 14	55C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	3	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	5.34E 04		
34S10	GATE	B-1	KVRDIP 14	56C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	3	INORGANIC	75/75	GT	EQP OP	18CY 95X	3.23E 04		
34S10	GATE	B-1	KVRDIP 14	56C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	3	INORGANIC	75/75	GT	EQP OP	24CY 95X	2.83E 03		
34S112	FLIPFLOP JK	B-1	KVRDIP 16	62C	DIG PROC	REL Q	-054C 050C	/ 0		
		16	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	2.24E 04		

DIGITAL DEVICE DATA

T.I. TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S112	FLIPFLOP JK	B-1 16	KVRDIP 16 INORGANIC	62C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.93E 04		
54S112	FLIPFLOP JK	B-1 16	KVRDIP 16 INORGANIC	62C 72/74	DISPLAY: AI	FIELD Q N.A.		/ 0 3.59E 04		
54S112	FLIPFLOP JK	B-1 16	KVRDIP 16 INORGANIC	83C 74/75	DISPLAY: AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 1.81E 04		
54S113	FLIPFLOP JK	B-1 16	KVRDIP 14 INORGANIC	64C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 5.12E 03		
54S113	FLIPFLOP JK	B-1 16	KVRDIP 14 INORGANIC	64C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 3.92E 03		
54S111	GATE N.R.	B-1 3	KVRDIP 14 INORGANIC	58C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 4.17E 04		
54S111	GATE N.R.	B-1 3	KVRDIP 14 INORGANIC	58C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 5.45E 04		
54S111	GATE N.R.	B-1 3	KVRDIP 14 INORGANIC	58C 76/76	RADAR: GF	FIELD Q N.A.		/ 0 1.34E 04		
54S133	GATE N.R.	B-1 1	KVRFPK 16 INORGANIC	28C 73/75	DIG PROC: AI	CHECK Q EQP OP	025C	/ 0 2.26E 07		
54S133	GATE N.R.	B-1 1	KVRFPK 16 INORGANIC	57C 75/75	DIG PROC: AI	REL Q TCVPC	-069C 054C 14CY .71G62X	/ 0 3.14E 05		
54S133	GATE N.R.	B-1 1	KVRDIP 16 INORGANIC	52C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 7.98E 03		
54S133	GATE N.R.	B-1 1	KVRDIP 16 INORGANIC	52C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.04E 04		
54S138	DECODE/DEMUX N.R.	B-1 16	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 2.97E 04		
54S151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 5.11E 03		
54S151	MULTIPLEXER N.R.	NONE 17	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 1.02E 04		
54S153	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 INORGANIC	68C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.12E 04		
54S153	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 INORGANIC	68C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.46E 04		
54S153	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 5.11E 04		
54S157	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 2.46E 04		
54S158	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 INORGANIC	66C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 8.82E 03		
54S158	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 INORGANIC	66C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.15E 04		
54S158	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 2.52E 04		
54S15	GATE N.R.	B-1 3	KVRDIP 14 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 1.05E 04		
54S174	FLIPFLOP D	B-1 36	KVRDIP 16 INORGANIC	76/76	RADAR: GF	FIELD Q N.A.		/ 0 1.60E 03		
54S175	FLIPFLOP D	B-1 24	KVRDIP 16 INORGANIC	31C 75/75	DISPLAY: GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 6.30E 03		

DIGITAL DEVICE DATA

T.I. TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S182	GENERATOR	B-1	KVRFPK 16	56C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	19	INORGANIC	73/75	AI	EQP OP		2.53E 05		
54S182	GENERATOR	B-1	KVRFPK 16	85C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	19	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	3.70E 03		
54S195	SHIFT REG	B-1	KVRDIP 14	38C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	53	INORGANIC	75/75	GT	EQP OP	18CY 95X	7.56E 03		
54S195	SHIFT REG	B-1	KVRDIP 14	38C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	53	INORGANIC	75/75	GT	EQP OP	24CY 95X	1.13E 03		
54S20	GATE	B-1	KVRFPK 14	30C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	2	INORGANIC	73/75	AI	EQP OP		1.60E 07		
54S20	GATE	B-1	KVRFPK 14	59C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	2.53E 05		
54S20	GATE	B-1	KVRDIP 14	53C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	2.73E 04		
54S20	GATE	B-1	KVRDIP 14	53C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	3.57E 04		
54S20	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	2	INORGANIC	72/74	AIU	N.A.		2.26E 05		
54S20	GATE	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	2	INORGANIC	74/75	AIU	N.A.		8.04E 03		
54S20	GATE	B-1	KVRDIP 14	54C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	2	INORGANIC	75/75	GT	EQP OP	18CY 95X	6.30E 03		
54S280	GENERATOR	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	46	INORGANIC	76/76	IGF	N.A.		1.28E 03		
54S40	GATE	B-1	KVRDIP 14	54C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.86E 04		
54S40	GATE	B-1	KVRDIP 14	54C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	2.43E 04		
54S40	GATE	B-1	KVRDIP 14	55C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	2	INORGANIC	75/75	GT	EQP OP	18CY 95X	1.51E 04		
54S40	GATE	B-1	KVRDIP 14	55C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	2	INORGANIC	75/75	GT	EQP OP	24CY 95X	2.83E 03		
54S40	GATE	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	2	INORGANIC	76/76	IGF	N.A.		1.05E 05		
54S64	GATE	B-1	KVRFPK 14	40C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	5	INORGANIC	73/75	AI	EQP OP		2.42E 07		
54S64	GATE	B-1	KVRFPK 14	69C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	5	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	3.31E 05		
54S64	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	5	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	8.26E 03		
54S64	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	5	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	1.08E 04		
54S74	FLIPFLOP	B-1	KVRFPK 14	36C	DIG PROC	CHECK Q	025C	/ 1		
	D	12	INORGANIC	73/75	AI	EQP OP		4.68E 07		
54S74	FLIPFLOP	B-1	KVRFPK 14	65C	DIG PROC	REL Q	-069C 054C	/ 0		
	D	12	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.21E 06		
54S74	FLIPFLOP	B-1	KVRDIP 14	58C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	12	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	3.08E 04		
54S74	FLIPFLOP	B-1	KVRDIP 14	58C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	12	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	4.03E 04		

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T.I. TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S74	FLIPFLOP D	B-1 12	KVRDIP 14 INORGANIC	59C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 5.42E 04		
54S74	FLIPFLOP D	B-1 12	KVRDIP 14 INORGANIC	59C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 5.66E 03		
54S74	FLIPFLOP D	B-1 12	KVRDIP 14 INORGANIC		RADAR GF	FIELD Q N.A.		/ 0 1.47E 04		
54S83	ADDER FULL	B-1	KVRDIP 16 INORGANIC	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 2.37E 04		
54S83	ADDER FULL	B-1	KVRDIP 16 INORGANIC	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 3.09E 04		
54S85	COMPARATOR N.R.	B-1 31	KVRDIP 16 INORGANIC		RADAR GF	FIELD Q N.A.		/ 0 2.24E 04		
54S86	GATE N.R.	B-1 4	KVRDIP 14 INORGANIC		RADAR GF	FIELD Q N.A.		/ 0 2.84E 04		
74S00	GATE N.R.	NONE 4	EADIP 14 INORGANIC	158C 73/74	NA NA	LIFE G OP CNST	150C 100X	100/ 0 3.53E 07		
74S00	GATE N.R.	NONE 4	EADIP 14 INORGANIC	33C 77/77	INTRFACE GBC	CHECK G EQP OP	025C	/ 0 1.16E 03		

DIGITAL DEVICE DATA

VARIOUS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S00	GATE	B1/JB	DIP 14			RADAR	FIELD Q	/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.		6.58E 04		
54S00	GATE	B-1	DIP 14	35C		DISPLAY	FIELD Q	/ 0		
	N.R.	4	N.R.	75/76	GT	N.A.	025C	4.82E 03		
54S00	GATE	B-1	DIP 14	40C		RADAR	FIELD G	/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.	030C	7.59E 03		
54S00	GATE	B-1	KVRDIP 14	60C		DIG PROC	REL Q	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	-054C 050C 13CY1.3G 62X	9.27E 04		
54S00	GATE	B-1	KVRDIP 14	60C		DIG PROC	REL Q	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	-054C 050C 17CY1.3G 62X	1.21E 03		
54S00	GATE	B-1	KVRDIP 14			DIG PROC	FIELD G	/ 0		
	N.R.	4	N.R.	75/76	AIU	N.A.		8.53E 04		
54S00	GATE	B-1	KVRDIP 14			DISPLAY	FIELD Q	/ 0		
	N.R.	4	N.R.	72/74	AI	N.A.		8.95E 03		
54S00	GATE	B-1	KVRDIP 14	81C		DISPLAY	REL Q	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	-054C 071C 118CY2.2G53X	4.53E 03		
54S04	INVERTER	B1/JB	DIP 14			RADAR	FIELD Q	/ 0		
	N.R.	6	N.R.	76/76	GF	N.A.		1.32E 05		
54S04	INVERTER	B-1	DIP 14	35C		DISPLAY	FIELD Q	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.	025C	4.87E 05		
54S10	GATE	B1/JB	DIP 14			RADAR	FIELD Q	/ 0		
	N.R.	3	N.R.	76/76	GF	N.A.		2.40E 04		
54S10	GATE	B-1	DIP 14	65C		COMMUNIC	CHECK Q	/ 0		
	N.R.	3	N.R.	75/76	AI	TCVPC	-054C 055C 14CY 2.2G70X	2.70E 04		
54S10	GATE	B-1	DIP 14	65C		COMMUNIC	CHECK Q	/ 0		
	N.R.	3	N.R.	75/76	AI	TCVPC	-054C 055C 15CY 2.2G70X	2.81E 04		
54S10	GATE	B-1	DIP 14	65C		COMMUNIC	REL Q	/ 0		
	N.R.	3	N.R.	75/75	AI	TCVPC	-054C 055C 140CY2.2G70X	1.17E 04		
54S10	GATE	B-1	DIP 14	65C		COMMUNIC	RELPR Q	/ 0		
	N.R.	3	N.R.	74/75	AI	TCVPC	-054C 055C 16CY2.2G 70X	1.33E 04		
54S10	GATE	B-1	DIP 14	65C		COMMUNIC	RELPR Q	/ 0		
	N.R.	3	N.R.	74/76	AI	TCVPC	-054C 055C 16CY 2.2G70X	2.70E 04		
54S10	GATE	B-1	DIP 14	35C		COMMUNIC	FIELD Q	/ 0		
	N.R.	3	N.R.	75/76	GT	N.A.	025C	3.30E 04		
54S10	GATE	B-1	DIP 14	35C		DISPLAY	FIELD Q	/ 0		
	N.R.	3	N.R.	75/76	GT	N.A.	025C	4.03E 05		
54S112	FLIPPLOP	B1/JB	DIP 16			RADAR	FIELD Q	/ 0		
	JK	16	N.R.	76/76	GF	N.A.		1.37E 04		
54S112	FLIPPLOP	B-1	DIP 16	40C		RADAR	FIELD G	/ 0		
	JK	16	N.R.	76/76	GF	N.A.	030C	2.78E 05		
54S133	GATE	B1/JB	DIP 16			RADAR	FIELD Q	/ 0		
	N.R.	1	N.R.	76/76	GF	N.A.		2.52E 04		
54S140	INTERFACE LINE DRIVER	B-1	DIP 14	40C		RADAR	FIELD G	/ 0		
		2	N.R.	76/76	GF	N.A.	030C	3.49E 05		
54S153	MULTIPLEXER	B1/JB	DIP 16			RADAR	FIELD Q	/ 0		
	N.R.	16	N.R.	76/76	GF	N.A.		1.92E 03		
54S157	MULTIPLEXER	B-1	KVRDIP 16	60C		DIG PROC	REL Q	/ 0		
	N.R.	15	N.R.	75/75	AI	TCVPC	-054C 050C 13CY1.3G 62X	3.43E 04		
54S157	MULTIPLEXER	B-1	KVRDIP 16	60C		DIG PROC	REL Q	/ 0		
	N.R.	15	N.R.	75/75	AI	TCVPC	-054C 050C 17CY1.3G 62X	4.48E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S174	FLIPFLOP	B1/JB	DIP 16		RADAR	FIELD Q		/ 0		
	D	36	N.R.	76/76	GF	N.A.		4.66E 05		
54S174	FLIPFLOP	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	36	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.26E 05		
54S174	FLIPFLOP	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	36	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.64E 05		
54S174	FLIPFLOP	C-1	KVRDIP 16	45C	RADAR	REL Q	020C	/ 0		
	D	36	N.R.	76/76	GT	EQP OP		1.65E 06		
54S175	FLIPFLOP	B1/JB	DIP 16		RADAR	FIELD Q		/ 0		
	D	24	N.R.	76/76	GF	N.A.		7.16E 04		
54S175	FLIPFLOP	B-1	DIP 16	35C	DISPLAY	FIELD Q	025C	/ 0		
	D	24	N.R.	75/76	GT	N.A.		8.98E 04		
54S175	FLIPFLOP	C-1	KVRDIP 16	30C	RADAR	REL Q	020C	/ 0		
	D	24	N.R.	76/76	GT	EQP OP		1.88E 04		
54S181	LOGIC UNIT ARITHMETIC	B-1	KVRDIP 24	60C	DIG PROC	REL Q	-054C 050C	/ 0		
			N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.78E 03		
54S181	LOGIC UNIT ARITHMETIC	B-1	KVRDIP 24	60C	DIG PROC	REL Q	-054C 050C	/ 0		
			N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.94E 03		
54S181	LOGIC UNIT ARITHMETIC	C-1	KVRDIP 24	30C	RADAR	REL Q	020C	/ 0		
			N.R.	76/76	GT	EQP OP		5.71E 05		
54S195	SHIFT REG	B-1	DIP 16	50C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	53	N.R.	75/76	GT	N.A.		3.34E 05		
54S20	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	76/76	GF	N.A.		1.15E 04		
54S20	GATE	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	2	N.R.	75/76	GT	N.A.		7.11E 04		
54S20	GATE	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0		
	N.R.	2	N.R.	76/76	GF	N.A.		5.28E 05		
54S20	GATE	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	2	N.R.	75/76	AIU	N.A.		3.66E 04		
54S20	GATE	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AI	N.A.		5.97E 03		
54S20	GATE	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	74/75	AI	TCVPC	118CY2.2G53X	3.02E 03		
54S40	BUFFER	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	2	N.R.	76/76	GF	N.A.		1.15E 05		
54S40	BUFFER	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	2	N.R.	75/76	GT	N.A.		2.84E 05		
54S74	FLIPFLOP	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	D	12	N.R.	76/76	GF	N.A.		9.23E 04		
54S74	FLIPFLOP	B-1	DIP 14	55C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	D	12	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	1.35E 04		
54S74	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	D	12	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	1.41E 04		
54S74	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0		
	D	12	N.R.	75/75	AI	TCVPC	140CY2.2G70X	5.86E 03		
54S74	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	D	12	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	6.63E 03		
54S74	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	D	12	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.35E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S74	FLIPFLOP D	B-1 12	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 5.94E 05		
54S74	FLIPFLOP D	B-1 12	DIP 14 N.R.	40C 76/76	RADAR GF	FIELD G N.A.	030C	/ 0 1.67E 05		
74S00	GATE N.R.	N.R. 4	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 8.43E 05		
74S00	GATE N.R.	NONE 4	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 4.09E 05		
74S02	GATE N.R.	N.R. 4	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.98E 05		
74S02	GATE N.R.	NONE 4	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.96E 05		
74S03	GATE N.R.	N.R. 4	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 9.92E 04		
74S04	INVERTER N.R.	N.R. 6	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 3.47E 05		
74S04	INVERTER N.R.	NONE 6	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.28E 06		
74S05	INVERTER N.R.	N.R. 6	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.53E 05		
74S10	GATE N.R.	NONE 3	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.41E 05		
74S112	FLIPFLOP JK	NONE 16	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.32E 05		
74S11	GATE N.R.	N.R. 3	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 3.06E 05		
74S11	GATE N.R.	NONE 3	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 2.02E 05		
74S133	GATE N.R.	N.R. 1	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 9.92E 04		
74S138	DECODE/DEMUX N.R.	N.R. 16	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 9.92E 04		
74S138	DECODE/DEMUX N.R.	NONE 16	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 5.62E 05		
74S138	DECODE/DEMUX N.R.	NONE 16	DIP 16 N.R.	50C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55%PWR	/ 1 7.24E 06		
74S153	MULTIPLEXER N.R.	N.R. 16	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 2.98E 05		
74S153	MULTIPLEXER N.R.	NONE 16	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 6.48E 05		
74S157	MULTIPLEXER N.R.	NONE 15	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 3.81E 05		
74S158	MULTIPLEXER N.R.	NONE 15	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.24E 05		
				76/78				/ 1 1.01E 05		

DIGITAL DEVICE DATA

VARIOUS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
74S175	FLIPFLOP D	NONE 24	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 3.34E 05		
74S257	MULTIPLEXER N.R.	N.R. 15	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 3.88E 05		
				76/78				/ 1 1.07E 06		
74S257	MULTIPLEXER N.R.	NONE 15	DIP 16 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 3.61E 05		
				76/78				/ 1 2.02E 05		
74S257	MULTIPLEXER N.R.	NONE 15	DIP 16 N.R.	30C 76/77	COMB/NOG GBC	FIELD U N.A.	020C	/ 0 1.91E 05		
74S51	GATE N.R.	NONE 6	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 4.44E 05		
74S74	FLIPFLOP D	N.R. 12	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 9.48E 05		
74S74	FLIPFLOP D	NONE 12	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 8.64E 05		
82S62	GENERATOR N.R.	NONE 12	DIP 14 N.R.	35C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 2.64E 05		
				76/78				/ 1 3.74E 05		

DIGITAL DEVICE DATA

FAIRCHILD TTL,L.PWR.SCHOTTKY		:MANUFACTURER :OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
: PART : : NO. :	: DEVICE : : FUNCTION :	: SCR.N. : : CLASS :	: PACKAGE/ : : PINS :	: JCT.* : : TEMP. :	: EQUIP. : : TYPE :	: DATA : : CLASS. :	: STRESS : : LEVEL :	: #TESTED/ : : #FAILED :	: REMARKS :	:
:	:	: NO. : : GATES :	: CHIP : : PROTECT. :	: TEST : : DATE :	: APPL. : : ENV. :	: TEST : : TYPE :	:	: PART : : HOURS :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 85C :	: NA :	: LIFE U :	: 085C 85ZRH :	: 50/ 0 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: 77/77 :	: NA :	: HUMLIFE :	:	: 5.00E 04 :	:	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 50/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 85C :	: NA :	: LIFE U :	: 085C 85ZRH :	: 100/ 0 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: 77/77 :	: NA :	: HUMLIFE :	:	: 1.00E 05 :	:	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 100/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:

NATIONAL TTL,L.PWR.SCHOTTKY		:MANUFACTURER :OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
: PART : : NO. :	: DEVICE : : FUNCTION :	: SCR.N. : : CLASS :	: PACKAGE/ : : PINS :	: JCT.* : : TEMP. :	: EQUIP. : : TYPE :	: DATA : : CLASS. :	: STRESS : : LEVEL :	: #TESTED/ : : #FAILED :	: REMARKS :	:
:	:	: NO. : : GATES :	: CHIP : : PROTECT. :	: TEST : : DATE :	: APPL. : : ENV. :	: TEST : : TYPE :	:	: PART : : HOURS :	:	:
: 74LS00 :	: GATE :	: NONE :	: KVRDIP 14 :	: 135C :	: NA :	: LIFE V :	: 125C :	: 29/ 0 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: /75 :	: NA :	: OP CNST :	:	: 2.90E 04 :	:	:
:	:	:	:	:	:	: EM :	:	: 29/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 126C :	: NA :	: LIFE V :	: 125C :	: 32/ 0 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: /75 :	: NA :	: OP CNST :	:	: 3.20E 04 :	:	:
:	:	:	:	:	:	: EM :	:	: 32/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 85C :	: NA :	: LIFE U :	: 085C 85ZRH :	: 50/ 1 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: 77/77 :	: NA :	: HUMLIFE :	:	: 4.95E 04 :	:	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 49/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 85C :	: NA :	: LIFE U :	: 085C 85ZRH :	: 100/ 1 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: 77/77 :	: NA :	: HUMLIFE :	:	: 9.95E 04 :	:	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 99/ 3 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 86C :	: NA :	: LIFE V :	: 085C 85ZRH :	: 30/ 0 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: /75 :	: NA :	: RHOC :	:	: 3.00E 04 :	:	:
:	:	:	:	:	:	: EM :	:	: 30/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS00 :	: GATE :	: NONE :	: EADIP 14 :	: 126C :	: NA :	: LIFE U :	: 125C :	: 200/ 0 :	:	:
:	: N.R. :	: 4 :	: INORGANIC :	: 77/77 :	: NA :	: OP LIFE :	:	: 2.00E 05 :	:	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 200/ 0 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:
: 74LS74 :	: FLIPFLOP :	: NONE :	: EADIP 14 :	: 85C :	: NA :	: LIFE U :	: 085C 85ZRH :	: 50/ 1 :	:	:
:	: D :	: 12 :	: INORGANIC :	: 77/77 :	: NA :	: HUMLIFE :	:	: 4.95E 04 :	:	:
:	:	:	:	:	:	: FNCT EM :	: 025C :	: 49/ 1 :	:	:
:	:	:	:	:	:	:	:	: 0. :	:	:

DIGITAL DEVICE DATA

SIGNETICS
TTL, L.PWR. SCHOTTKYMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
74LS00	GATE N.R.	NONE 4	EADIP 14 N.R.	126C 74/74	NA	LIFE V OP DYN	125C	49/ 0 4.90E 04	
						EM		49/ 0 0.	
74LS00	GATE N.R.	NONE 4	EADIP 14 N.R.	85C 77/77	NA	LIFE U HUM LIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 0 0.	
74LS00	GATE N.R.	NONE 4	EADIP 14 N.R.	85C 77/77	NA	LIFE U HUM LIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 0 0.	
74LS00	GATE N.R.	NONE 4	EADIP 14 N.R.	85C 77/77	NA	LIFE U HUM LIFE	085C 85XRH	100/ 2 9.90E 04	
						FNCT EM	025C	98/ 2 0.	
74LS04	INVERTER N.R.	NONE 6	EADIP 14 N.R.	150C 74/74	NA	LIFE V STG LIFE	150C	48/ 0 2.40E 05	
						EM		48/ 1 0.	1/CATASTROPHIC; WIRE BOND
74LS04	INVERTER N.R.	NONE 6	EADIP 14 N.R.	127C 74/74	NA	LIFE V OP DYN	125C	48/ 0 2.40E 05	
						EM		48/ 0 0.	
74LS10	GATE N.R.	NONE 3	EADIP 14 N.R.	126C 74/74	NA	LIFE V OP DYN	125C	50/ 0 5.00E 04	
						EM		50/ 0 0.	
74LS10	GATE N.R.	NONE 3	EADIP 14 N.R.	126C 74/74	NA	LIFE V OP DYN	125C	50/ 0 5.00E 04	
						EM		50/ 0 0.	

DIGITAL DEVICE DATA

T.I. TTL, L.PWR. SCHOTTKY		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54LSXX	N.R.	NONE	KVRDIP 0	160C	NA	LIFE V	150C	613/ 0	
	N.R.		INORGANIC	74/74	NA	STGLIFE		2.45E 06	
						STAT EM		613/ 1	1/DEGRADED
								0.	
54LSXX	N.R.	NONE	KVRDIP 0	135C	NA	LIFE V	125C	484/ 0	
	N.R.		INORGANIC	74/74	NA	REVBias		1.53E 06	
						STAT EM		484/ 2	1/DEGRADED
								0.	1/CATASTROPHIC
54LSXX	N.R.	NONE	KVRDIP 0	160C	NA	LIFE V	150C	127/ 0	
	N.R.		INORGANIC	74/74	NA	REVBias		5.08E 05	
						STAT EM		127/ 3	2/DEGRADED
								0.	1/CATASTROPHIC
74LS00	GATE	NONE	EADIP 14	60C	NA	LIFE U	060C 85ZRH	20/ 0	
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		2.00E 04	
						FNCT EM	025C	20/ 0	
								0.	
74LS00	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	50/ 0	
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04	
						FNCT EM	025C	50/ 0	
								0.	
74LS00	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	50/ 0	
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04	
						FNCT EM	025C	50/ 0	
								0.	
74LS00	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	50/ 0	
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04	
						FNCT EM	025C	50/ 0	
								0.	
74LS00	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	100/ 0	
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		1.00E 05	
						FNCT EM	025C	100/ 24	
								0.	
74LS00	GATE	NONE	EADIP 14	126C	NA	LIFE U	125C	200/ 1	
	N.R.	4	INORGANIC	77/77	NA	OP LIFE		8.00E 05	
						FNCT EM	025C	199/ 0	
								0.	

DIGITAL DEVICE DATA

T.I. TTL, L. MURPHY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER							
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
74LS02	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	49/ 1			
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		4.85E 04			
						FNCT EM	025C	49/ 0			
								0.			
74LS02	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS04	INVERTER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	6	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS04	INVERTER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	6	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS20	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	2	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS38	BUFFER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS38	BUFFER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS74	FLIPFLOP	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	D	12	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS74	FLIPFLOP	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	D	12	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			
74LS74	FLIPFLOP	NONE	EADIP 14	27C	INTERFACE	CHECK G	025C	/ 0			
	D	12	INORGANIC	77/77	GBC	EQP OP		1.16E 03			

DIGITAL DEVICE DATA

VARIOUS TTL, L. PWR. SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
74LS10	GATE	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	3	N.R.	76/78	GBC	N.A.		8.52E 05		
74LS273	FLIPFLOP	NONE	DIP 20	50C	DIG PROC	FIELD U	025C	/ 0		
	D	50	N.R.	76/78	GBC	N.A.		1.66E 04		
74LS75	LATCH	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0		
	BISTABLE	24	N.R.	76/78	GBC	N.A.		4.96E 05		

TRANSITRON TTL, SUHL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
140	GATE	NONE	KVRDIP 14	135C	NA	LIFE V	125C 100%	22/ 0		
	N.R.	4	INORGANIC	74/74	NA	OP CNST		2.20E 04		

DIGITAL DEVICE DATA

VARIOUS TTL, SUHL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
2124	FLIPFLOP	C-1	FPK 14		RADAR	FIELD G		/ 0		
	JK	20	N.R.	75/76	AIU	N.A.		1.12E 06		
2125	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	JK	10	N.R.	74/75	AIU	N.A.		7.30E 04		
2125	FLIPFLOP	C-1	FPK 14		RADAR	FIELD G		/ 0		
	JK	10	N.R.	75/76	AIU	N.A.		7.85E 05		
2125	FLIPFLOP	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	JK	10	N.R.	72/74	AIU	N.A.		8.78E 04		
2125	FLIPFLOP	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	JK	10	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	4.05E 03		
3100	GATE	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	N.R.	4	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	5.51E 04		
3100	GATE	B1/JB	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	140CY2.2G70X	1.17E 04		
3100	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	054C 055C	/ 0		
	N.R.	4	N.R.	75/76	AI	TCVPC	16CY 2.2G70X	4.23E 03		
3100	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.33E 04		
3100	GATE	B1/JB	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	N.R.	4	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	2.28E 04		
3151	FLIPFLOP	B1/JB	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	JK	8	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	1.35E 04		
3151	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	JK	8	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	1.41E 04		
3151	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0		
	JK	8	N.R.	75/75	AI	TCVPC	140CY2.2G70X	5.86E 03		
3151	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	JK	8	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	6.63E 03		
3151	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	JK	8	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	1.35E 04		
3160	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	D	12	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	2.70E 04		
3160	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0		
	D	12	N.R.	75/76	AI	TCVPC	15CY 2.2G70X	2.81E 04		
3160	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0		
	D	12	N.R.	75/75	AI	TCVPC	140CY2.2G70X	1.17E 04		
3160	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 1	1/CATASTROPHIC	
	D	12	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.33E 04		
3160	FLIPFLOP	B-1	DIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0		
	D	12	N.R.	74/76	AI	TCVPC	16CY 2.2G70X	2.70E 04		
G140	GATE	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.		3.47E 04		
G141	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
G141	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		
G370	INVERTER	B-1	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
G370	INVERTER	B-1	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		

DIGITAL DEVICE DATA

ADV MICRO DEV TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
2501	COUNTER BINARY	B-1 50	FPK 16 INORGANIC	96C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 2.04E 03		
2501	COUNTER BINARY	B-1 50	FPK 16 INORGANIC	96C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 2.58E 03		
2501	COUNTER BINARY	B-1 50	FPK 16 INORGANIC	96C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 1.41E 03		
2602	FLIPFLOP MONOSTABLE	B-1 14	KVRDIP 16 INORGANIC	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 1.35E 05		
2602	FLIPFLOP MONOSTABLE	B-1 14	KVRDIP 16 INORGANIC	61C 75/75	COMMUNIC GT	REL G EQP OF	004C 051C 16CY 95X	/ 0 6.96E 03		
2602	FLIPFLOP MONOSTABLE	B-1 14	KVRDIP 16 INORGANIC	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 6.19E 05		
2602	FLIPFLOP MONOSTABLE	B-1 14	KVRDIP 16 INORGANIC	61C 75/75	DISPLAY GT	REL G EQP OF	004C 051C 18CY 95X	/ 0 3.40E 04		
2602	FLIPFLOP MONOSTABLE	B-1 14	KVRDIP 16 INORGANIC	61C 75/75	DISPLAY GT	REL G EQP OF	004C 051C 24CY 95X	/ 0 5.09E 03		
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G81X	/ 0 1.88E 04		
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 75/75	RADAR AU	REL Q TCVPC	-054C 071C 4CY 2.2G 81X	/ 0 1.50E 03		
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 75/75	RADAR AU	REL Q TCVPC	-054C 071C 5CY 2.2G 81X	/ 0 3.76E 03		
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 2.10E 05		
				76/76				/ 1 4.72E 05	1/DEGRADED	
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 6.92E 05		
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 1.50E 05		
2602	FLIPFLOP MONOSTABLE	N.R. 14	KVRDIP 16 INORGANIC	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 9CY 2.2G 81X	/ 0 2.03E 04		
54154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 2.80E 03		
54154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 3.66E 03		
9309	MULTIPLEXER N.R.	B-2 16	KVRFPK 16 INORGANIC	160C 74/75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
9309	MULTIPLEXER N.R.	B-2 16	KVRFPK 16 INORGANIC	135C 74/75	NA NA	LIFE V RINGCNT	125C	77/ 0 7.70E 04		
9312	MULTIPLEXER N.R.	B-1 17	AUDIP 16 N.R.	160C 74/74	NA NA	LIFE Q STGLIFE	150C	45/ 0 4.50E 04		
9312	MULTIPLEXER N.R.	B-1 17	AUDIP 16 N.R.	135C 74/74	NA NA	LIFE Q RINGCNT	125C	76/ 0 4.34E 04		
9312	MULTIPLEXER N.R.	B-2 17	AUFFPK 16 N.R.	135C 74/75	NA NA	LIFE V STGLIFE	125C	55/ 0 5.50E 04		
9312	MULTIPLEXER N.R.	B-2 17	AUFFPK 16 N.R.	135C 74/75	NA NA	LIFE V RINGCNT	125C	77/ 0 7.70E 04	1/ OPEN DIE ENVIRONMENT OVERSTRESS	
						EM	025C	77/ 1 0.		

DIGITAL DEVICE DATA

ADV MICRO DEV TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9316	COUNTER	C-2	KVRFPK 16	150C	NA	LIVE V	150C	55/ 0	
	BINARY	57	N.R.	75/75	NA	STGLIFE		5.50E 04	
9316	COUNTER	C-2	KVRFPK 16	167C	NA	LIVE V	125C	77/ 0	
	BINARY	57	N.R.	75/75	NA	RINGCNT		7.70E 04	
9318	ENCODER	B-1	KVRDIP 16	80C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	29	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	4.76E 03	
9318	ENCODER	B-1	KVRDIP 16	80C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	29	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	6.22E 03	
9322	MULTIPLEXER	B-2	KVRDIP 16	160C	NA	LIVE V	150C	77/ 0	
	N.R.	19	INORGANIC	75/75	NA	STGLIFE		7.70E 04	
9322	MULTIPLEXER	B-2	KVRDIP 16	135C	NA	LIVE V	125C	129/ 0	
	N.R.	19	INORGANIC	75/75	NA	RINGCNT		1.29E 05	
9340	LOGIC UNIT	B-1	KVRDIP 24	93C	DIG PROC	REL Q	-054C 050C	/ 0	
	ARITHMETIC	66	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	7.28E 03	
9340	LOGIC UNIT	B-1	KVRDIP 24	93C	DIG PROC	REL Q	-054C 050C	/ 0	
	ARITHMETIC	66	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	9.52E 03	
93L16	COUNTER	B-1	KVRDIP 16	59C	DIG PROC	REL Q	-054C 050C	/ 0	
	BINARY	58	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.08E 04	
93L16	COUNTER	B-1	KVRDIP 16	59C	DIG PROC	REL Q	-054C 050C	/ 0	
	BINARY	58	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.41E 04	
93L24	COMPARATOR	B-1	KVRDIP 16	56C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	27	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.13E 04	
93L24	COMPARATOR	B-1	KVRDIP 16	56C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	27	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.48E 04	
93L66	COUNTER	B-1	KVRDIP 16	50C	COMMUNIC	FIELD Q	023C	/ 0	
	BINARY	55	INORGANIC	75/76	GT	N.A.		7.33E 04	
93L66	COUNTER	B-1	KVRDIP 16	29C	COMMUNIC	REL G	004C 051C	/ 0	
	BINARY	55	INORGANIC	75/75	GT	EQF OP	15CY 95X	1.08E 04	

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DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54193	COUNTER	B-1	KVRFPK 16	110C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BINARY	48	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.02E 03		
54193	COUNTER	B-1	KVRFPK 16	110C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BINARY	48	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.29E 03		
5496	SHIFT REG	B-1	KVRFPK 16	54C	SONAR	FIELD G	025C	/ 0		
	N.R.	39	N.R.	74/76	NSS	N.A.		1.30E 06		
5496	SHIFT REG	B-1	KVRFPK 16	54C	SONAR	REL Q	025C	/ 0		
	N.R.	39	N.R.	74/74	NSS	EQP OP		1.88E 05		
5496	SHIFT REG	B-1	KVRFPK 16		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	39	N.R.	74/74	NSS	VIB FTG	1 AXIS	3.19E 04		
						EQP OP	025C	/ 0		
								9.56E 04		
7408	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	25/ 0		
	N.R.	4	N.R.	72/75	NA	RHRB		2.50E 04		
7411	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0		
	N.R.	3	N.R.	72/75	NA	STGLIFE		3.80E 04		
7411	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	25/ 0		
	N.R.	3	N.R.	72/75	NA	RHRB		2.50E 04		
74153	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85ZRH	25/ 0		
	N.R.	16	N.R.	72/75	NA	RHRB		2.50E 04		
74154	DECODE/DEMUX	NONE	EADIP 24	95C	NA	LIFE U	085C 85ZRH	25/ 1		
	N.R.	25	N.R.	72/75	NA	RHRB		2.50E 04		
74163	COUNTER	NONE	EADIP 16	110C	NA	LIFE U	085C 85ZRH	25/ 0		
	BINARY	58	N.R.	72/75	NA	RHRB		2.50E 04		
74175	FLIPFLOP	NONE	EADIP 16	95C	NA	LIFE U	085C 85ZRH	25/ 1		
	D	24	N.R.	72/75	NA	RHRB		2.50E 04		
74190	COUNTER	B-1	EADIP 16	94C	NAVIGATE	REL Q	-054C 055C	/ 0		
	BCD	61	N.R.	75/75	AI	TCVPC	114CY2.2G70X	2.04E 03		
74193	COUNTER	NONE	EADIP 16	85C	NA	LIFE U	085C 85ZRH	25/ 2		
	BINARY	48	N.R.	72/75	NA	RHRB		2.50E 04		
7420	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	25/ 2		
	N.R.	2	N.R.	72/75	NA	RHRB		2.50E 04		
7425	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0		
	N.R.	2	N.R.	72/75	NA	STGLIFE		3.80E 04		
7425	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	25/ 0		
	N.R.	2	N.R.	72/75	NA	RHRB		2.50E 04		
7432	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85ZRH	25/ 0		
	N.R.	4	N.R.	72/75	NA	RHRB		2.50E 04		
7485	COMPARATOR	NONE	EADIP 16	110C	NA	LIFE U	085C 85ZRH	50/ 0		
	N.R.	31	N.R.	72/75	NA	RHRB		5.00E 04		

DIGITAL DEVICE DATA

FAIRCHILD
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9000	FLIPFLOP JK	B-1 13	KVRFPK 14 INORGANIC	84C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.02E 03	
9000	FLIPFLOP JK	B-1 13	KVRFPK 14 INORGANIC	84C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.29E 03	
9001	FLIPFLOP JK	B-1 15	KVRFPK 14 INORGANIC	86C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 6.13E 03	
9001	FLIPFLOP JK	B-1 15	KVRFPK 14 INORGANIC	86C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 4.24E 03	
9002	GATE N.R.	B-1 4	KVRFPK 14 INORGANIC	76C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 6.23E 04	
9002	GATE N.R.	B-1 4	KVRFPK 14 INORGANIC	76C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 7.88E 04	
9002	GATE N.R.	B-1 4	KVRFPK 14 INORGANIC	76C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 4.31E 04	
9003	GATE N.R.	B-1 3	KVRFPK 14 INORGANIC	75C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 4.29E 04	
9003	GATE N.R.	B-1 3	KVRFPK 14 INORGANIC	75C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 5.42E 04	
9003	GATE N.R.	B-1 3	KVRFPK 14 INORGANIC	75C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 2.90E 04	
9004	GATE N.R.	B-1 2	KVRFPK 14 INORGANIC	74C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.23E 04	
9004	GATE N.R.	B-1 2	KVRFPK 14 INORGANIC	74C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.55E 04	
9004	GATE N.R.	B-1 2	KVRFPK 14 INORGANIC	74C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 8.48E 03	
9005	GATE EXPANDABLE	B-1 6	KVRFPK 14 INORGANIC	77C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.84E 04	
9005	GATE EXPANDABLE	B-1 6	KVRFPK 14 INORGANIC	77C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 2.32E 04	
9005	GATE EXPANDABLE	B-1 6	KVRFPK 14 INORGANIC	77C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 1.20E 04	
9006	EXPANDER N.R.	B-1 2	KVRFPK 14 INORGANIC	73C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.02E 03	
9006	EXPANDER N.R.	B-1 2	KVRFPK 14 INORGANIC	73C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.29E 03	
9007	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	72C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.43E 04	
9007	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	72C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.81E 04	
9007	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	72C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 9.89E 03	
9008	GATE EXPANDABLE	B-1 5	KVRFPK 14 INORGANIC	76C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 1.12E 04	
9008	GATE EXPANDABLE	B-1 5	KVRFPK 14 INORGANIC	76C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.42E 04	
9008	GATE EXPANDABLE	B-1 5	KVRFPK 14 INORGANIC	76C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 7.07E 03	

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9009	BUFFER	B-1	KVRFPK 14	78C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	3.78E 04		
9009	BUFFER	B-1	KVRFPK 14	78C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	4.78E 04		
9009	BUFFER	B-1	KVRFPK 14	78C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	2.61E 04		
9012	GATE	B-1	KVRFPK 14	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	2.04E 03		
9012	GATE	B-1	KVRFPK 14	76C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.58E 03		
9014	GATE	B-1	KVRDIP 14	30C	SONAR	FIELD G	025C	/ 0		
	N.R.	6	N.R.	74/76	NSS	N.A.		5.41E 04		
9014	GATE	B-1	KVRDIP 14	30C	SONAR	REL Q	025C	/ 0		
	N.R.	6	N.R.	74/74	NSS	EQP OP		7.83E 03		
9014	GATE	B-1	KVRDIP 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	6	N.R.	74/74	NSS	VIB FTG	1 AXIS	1.33E 03		
						EQP OP	025C	/ 0		
								3.98E 03		
9014	GATE	B-1	KVRFPK 16	88C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.02E 04		
9014	GATE	B-1	KVRFPK 16	88C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.29E 04		
9014	GATE	B-1	KVRFPK 16	88C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	6.36E 03		
9015	GATE	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	2.25E 04		
9015	GATE	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.84E 04		
9015	GATE	B-1	KVRFPK 16	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	1.41E 04		
9016	INVERTER	B-1	KVRFPK 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	75/75	AU	TCVPC	114CY2.2G70X	1.25E 05		
9016	INVERTER	B-1	KVRFPK 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	75/75	AU	TCVPC	141CY2.2G70X	1.58E 05		
9016	INVERTER	B-1	KVRFPK 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	75/75	AU	TCVPC	78CY 2.2G70X	8.62E 04		
9017	INVERTER	B-1	KVRFPK 14	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.33E 04		
9017	INVERTER	B-1	KVRFPK 14	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.68E 04		
9017	INVERTER	B-1	KVRFPK 14	80C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	6.36E 03		
9020	FLIPFLOP	B-1	KVRFPK 16	96C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	27	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	2.04E 03		
9020	FLIPFLOP	B-1	KVRFPK 16	96C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	27	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	2.58E 03		
9020	FLIPFLOP	B-1	KVRFPK 16	96C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	27	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	1.41E 03		
9020	FLIPFLOP	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0		
	JK	27	N.R.	74/75	AU	N.A.		1.02E 04		
9020	FLIPFLOP	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0		
	JK	27	N.R.	72/74	AU	N.A.		5.12E 04		

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
19020	FLIPFLOP	B-1	KVRDIP 16	92C	RECORDER	REL Q	-054C 071C	/ 0		
	JK	27	N.R.	73/74	AU	TCVPC	411CY2.2G50X	2.96E 04		
19020	FLIPFLOP	B-1	KVRDIP 16	92C	RECORDER	RELPR Q	-054C 071C	/ 0		
	JK	27	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.00E 04		
19022	FLIPFLOP	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0		
	JK	27	N.R.	74/75	AU	N.A.		3.42E 03		
19022	FLIPFLOP	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0		
	JK	27	N.R.	72/74	AU	N.A.		1.71E 04		
19022	FLIPFLOP	B-1	KVRDIP 16	92C	RECORDER	REL Q	-054C 071C	/ 0		
	JK	27	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03		
19022	FLIPFLOP	B-1	KVRDIP 16	92C	RECORDER	RELPR Q	-054C 071C	/ 0		
	JK	27	N.R.	75/76	AU	TCVPC	139CY2.2G50X	3.33E 03		
19024	FLIPFLOP	B-1	KVRFPK 16	82C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	4.70E 04		
19024	FLIPFLOP	B-1	KVRFPK 16	82C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	5.88E 04		
19024	FLIPFLOP	B-1	KVRFPK 16	82C	NAVIGATE	REL Q	-054C 071C	/ 0		
	JK	16	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	3.18E 04		
19024	FLIPFLOP	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0		
	JK	16	N.R.	74/75	AU	N.A.		2.39E 04		
19024	FLIPFLOP	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0		
	JK	16	N.R.	72/74	AU	N.A.		1.20E 05		
19024	FLIPFLOP	B-1	KVRDIP 16	80C	RECORDER	REL Q	-054C 071C	/ 0		
	JK	16	N.R.	73/74	AU	TCVPC	411CY 2.2G50X	6.91E 04		
19024	FLIPFLOP	B-1	KVRDIP 16	80C	RECORDER	RELPR Q	-054C 071C	/ 0		
	JK	16	N.R.	75/76	AU	TCVPC	139CY2.2G50X	2.33E 04		
19300	SHIFT REG	B-1	KVRFPK 16	107C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	40	N.R.	75/75	AU	TCVPC	114CY2.2G70X	3.88E 04		
19300	SHIFT REG	B-1	KVRFPK 16	107C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	40	N.R.	75/75	AU	TCVPC	141CY2.2G70X	4.91E 04		
19300	SHIFT REG	B-1	KVRFPK 16	107C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	40	N.R.	75/75	AU	TCVPC	78CY 2.2G70X	2.68E 04		
19301	DECODER	B-1	KVRFPK 16	72C	NAVIGATE	REL Q	-054C 055C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	AI	TCVPC	114CY2.2G70X	1.02E 03		
19301	DECODER	B-1	KVRFPK 16	72C	NAVIGATE	REL Q	-054C 055C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	AI	TCVPC	141CY2.2G70X	1.29E 03		
19301	DECODER	B-1	KVRFPK 16	88C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	AU	TCVPC	114CY2.2G70X	7.15E 03		
19301	DECODER	B-1	KVRFPK 16	88C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	AU	TCVPC	141CY2.2G70X	9.04E 03		
19301	DECODER	B-1	KVRFPK 16	88C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BCD/DECIMAL	18	N.R.	75/75	AU	TCVPC	78CY 2.2G70X	4.24E 03		
19301	DECODER	B-1	KVRFPK 16	42C	SONAR	FIELD G	025C	/ 0		
	BCD/DECIMAL	18	N.R.	74/76	NSS	N.A.		1.08E 05		
19301	DECODER	B-1	KVRFPK 16	42C	SONAR	REL Q	025C	/ 0		
	BCD/DECIMAL	18	N.R.	74/74	NSS	EQP OP		1.57E 04		
19301	DECODER	B-1	KVRFPK 16		SONAR	CHECK Q	28RZ 1.3G	/ 0		
	BCD/DECIMAL	18	N.R.	74/74	NSS	VIB FTG	1 AXIS	2.66E 03		
						EQP OP	025C	/ 0		
								7.96E 03		

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
9301	DECODER	B-1	KVRDIP 16	66C	COMMUNIC	REL G	004C 051C	/ 0			
	BCD/DECIMAL	18	N.R.	75/75	GT	EQP OP	16CY 95X	8.11E 03			
9301	DECODER	B-1	KVRDIP 16	66C	DISPLAY	REL G	004C 051C	/ 0			
	BCD/DECIMAL	18	N.R.	75/75	GT	EQP OP	18CY 95X	2.94E 04			
9301	DECODER	B-1	KVRDIP 16	66C	DISPLAY	REL G	004C 051C	/ 0			
	BCD/DECIMAL	18	N.R.	75/75	GT	EQP OP	24CY 95X	7.35E 03			
9301	DECODER	NONE	EADIP 16	57C	DISPLAY	FIELD U	040C 55XPWR	/ 0			
	BCD/DECIMAL	18	N.R.	75/77	GBC	N.A.		3.38E 05			
9304	ADDER	B-1	KVRDIP 16	66C	DISPLAY	REL G	004C 051C	/ 0			
	FULL	22	N.R.	75/75	GT	EQP OP	18CY 95X	1.47E 04			
9305	COUNTER	B-1	KVRFPK 14	50C	SONAR	FIELD G	025C	/ 0			
	BINARY	44	N.R.	74/76	NSS	N.A.		2.71E 05			

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
19305	COUNTER BINARY	B-1 44	KVRFPK 14 N.R.	50C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 3.92E 04		
19305	COUNTER BINARY	B-1 44	KVRFPK 14 N.R.	50C 74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 6.64E 03		
						EQP OP	025C	/ 0 1.99E 04		
19305	COUNTER N.R.	NONE 44	EADIP 14 INORGANIC	72C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55IPWR	/ 0 1.86E 05		
19308	LATCH N.R.	B-1 56	KVRFPK 24 INORGANIC	99C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 9.19E 03		
19308	LATCH N.R.	B-1 56	KVRFPK 24 INORGANIC	99C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.16E 04		
19308	LATCH N.R.	B-1 56	KVRFPK 24 INORGANIC	99C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 5.65E 03		
19309	MULTIPLEXER N.R.	JB 16	KVRFPK 16 INORGANIC	89C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 5.72E 04		
19309	MULTIPLEXER N.R.	JB 16	KVRFPK 16 INORGANIC	89C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 7.23E 04		
19309	MULTIPLEXER N.R.	JB 16	KVRFPK 16 INORGANIC	89C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 3.96E 04		
19309	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 N.R.		PROCESS AU	FIELD G N.A.		/ 0 6.83E 03		
19309	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 N.R.		RECORDER AU	FIELD Q N.A.		/ 0 3.42E 04		
19309	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 N.R.	86C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 1.97E 04		
19309	MULTIPLEXER N.R.	B-1 16	KVRDIP 16 N.R.	86C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 6.66E 03		
19310	COUNTER DECADE	B-1 60	KVRDIP 16 N.R.		PROCESS AU	FIELD G N.A.		/ 0 1.71E 03		
19310	COUNTER DECADE	B-1 60	KVRDIP 16 N.R.		RECORDER AU	FIELD Q N.A.		/ 0 8.54E 03		
19310	COUNTER DECADE	B-1 60	KVRDIP 16 N.R.	104C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 4.94E 03		
19310	COUNTER DECADE	B-1 60	KVRDIP 16 N.R.	104C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 1.67E 03		
19311	DECODE/DEMUX N.R.	B-1 25	KVRFPK 24 N.R.	87C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 9.19E 03		
19311	DECODE/DEMUX N.R.	B-1 25	KVRFPK 24 N.R.	87C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.16E 04		
19311	DECODE/DEMUX N.R.	B-1 25	KVRFPK 24 N.R.	87C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 6.36E 03		
19311	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 N.R.		PROCESS AU	FIELD G N.A.		/ 0 1.71E 03		
19311	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 N.R.		RECORDER AU	FIELD Q N.A.		/ 0 8.54E 03		
19311	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 N.R.	82C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 4.94E 03		
19311	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 N.R.	82C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 1.67E 03		

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9312	MULTIPLEXER	JB	KVRFPK 16	71C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	17	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	1.02E 03		
9312	MULTIPLEXER	JB	KVRFPK 16	71C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	17	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	1.29E 03		
9312	MULTIPLEXER	JB	KVRFPK 16	87C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	17	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	6.13E 03		
9312	MULTIPLEXER	JB	KVRFPK 16	87C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	17	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	7.75E 03		
9312	MULTIPLEXER	JB	KVRFPK 16	87C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	17	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	3.53E 03		
9312	MULTIPLEXER	B-1	KVRFPK 16	87C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	17	N.R.	75/75	AU	TCVPC	114CY2.2G70X	1.02E 03		
9312	MULTIPLEXER	B-1	KVRFPK 16	87C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	17	N.R.	75/75	AU	TCVPC	141CY2.2G70X	1.29E 03		
9314	LATCH	B-1	KVRFPK 16	92C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	26	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	1.02E 03		
9314	LATCH	B-1	KVRFPK 16	92C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	26	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	1.29E 03		
9314	LATCH	B-1	KVRDIP 16	69C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	26	N.R.	75/75	GT	EQF OP	18CY 95X	3.36E 03		
9314	LATCH	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRN	50/ 5		
	N.R.	26	N.R.	72/75	NA	RHRB		3.13E 04		
9316	COUNTER	B-1	KVRFPK 16	110C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BINARY	57	N.R.	75/75	AU	TCVPC	114CY2.2G70X	4.39E 04		
9316	COUNTER	B-1	KVRFPK 16	110C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BINARY	57	N.R.	75/75	AU	TCVPC	141CY2.2G70X	5.55E 04		
9316	COUNTER	B-1	KVRFPK 16	110C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BINARY	57	N.R.	75/75	AU	TCVPC	78CY 2.2G70X	3.04E 04		
9316	COUNTER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0		
	BINARY	57	N.R.	74/75	AU	N.A.		1.71E 04		
9316	COUNTER	B-1	KVRDIP 16	104C	PROCESS	REL Q	-054C 071C	/ 0		
	BINARY	57	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 04		
9316	COUNTER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0		
	BINARY	57	N.R.	72/74	AU	N.A.		8.54E 04		
9316	COUNTER	B-1	KVRDIP 16	104C	RECORDER	RELPR Q	-054C 071C	/ 0		
	BINARY	57	N.R.	75/76	AU	TCVPC	139CY2.2G50X	8.33E 03		
9316	COUNTER	NONE	EADIP 16	79C	DISPLAY	FIELD U	040C 55XPR	/ 6		
	BINARY	57	N.R.	75/77	GBC	N.A.		3.64E 07		
9318	ENCODER	B-1	KVRFPK 16	101C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	24	N.R.	75/75	AU	TCVPC	114CY2.2G70X	1.02E 03		
9318	ENCODER	B-1	KVRFPK 16	101C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	24	N.R.	75/75	AU	TCVPC	141CY2.2G70X	1.29E 03		
9318	ENCODER	B-1	KVRFPK 16	55C	SONAR	FIELD G	025C	/ 0		
	N.R.	24	N.R.	74/76	NSS	N.A.		3.79E 05		
9318	ENCODER	B-1	KVRFPK 16	55C	SONAR	REL Q	025C	/ 0		
	N.R.	24	N.R.	74/74	NSS	EQF OP		5.48E 04		
9318	ENCODER	B-1	KVRFPK 16		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	24	N.R.	74/74	NSS	VIB FTG	1 AXIS	9.30E 03		
						EQF OP	025C	/ 0		
								2.79E 04		

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9318	ENCODER	B-1	KVRDIP 16	29C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	24	N.R.	75/75	GT	EQP OP	16CY 95X	2.71E 03		
9318	ENCODER	B-1	KVRDIP 16	29C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	24	N.R.	75/75	GT	EQP OP	18CY 95X	7.14E 03		
9318	ENCODER	B-1	KVRDIP 16	29C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	24	N.R.	75/75	GT	EQP OP	24CY 95X	2.26E 03		
9321	DECODER	B-1	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	18	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	4.08E 03		
9321	DECODER	B-1	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	18	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	5.16E 03		
9321	DECODER	B-1	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	18	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	2.12E 03		
9321	DECODER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0		
	N.R.	18	N.R.	74/75	AU	N.A.		3.42E 03		
9321	DECODER	B-1	KVRDIP 16	65C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	18	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.54E 03		
9321	DECODER	B-1	KVRDIP 16	65C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	18	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.01E 03		
9321	DECODER	B-1	KVRDIP 16	66C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	18	N.R.	75/75	GT	EQP OP	18CY 95X	1.68E 03		
9321	DECODER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0		
	N.R.	18	N.R.	72/74	AU	N.A.		1.71E 04		
9321	DECODER	B-1	KVRDIP 16	86C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	18	N.R.	73/74	AU	TCVPC	411CY2.2G50X	9.87E 03		
9321	DECODER	B-1	KVRDIP 16	86C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	18	N.R.	75/76	AU	TCVPC	139CY2.2G50X	3.33E 03		
9321	DECODER	NONE	EADIP 16	58C	DISPLAY	FIELD U	040C 55XPWR	/ 0		
	N.R.	18	N.R.	75/77	GBC	N.A.		1.09E 06		
9322	MULTIPLEXER	JB	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	19	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	6.84E 04		
9322	MULTIPLEXER	JB	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	19	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	8.65E 04		
9322	MULTIPLEXER	JB	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	19	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	4.66E 04		
9322	MULTIPLEXER	B-1	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	19	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	3.06E 03		
9322	MULTIPLEXER	B-1	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	19	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	3.87E 03		
9322	MULTIPLEXER	B-1	KVRFPK 16	89C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	19	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	2.12E 03		
9322	MULTIPLEXER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0		
	N.R.	19	N.R.	74/75	AU	N.A.		5.12E 03		
9322	MULTIPLEXER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0		
	N.R.	19	N.R.	72/74	AU	N.A.		2.56E 04		
9322	MULTIPLEXER	B-1	KVRDIP 16	86C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	19	N.R.	73/74	AU	TCVPC	411CY2.2G50X	1.48E 04		
9322	MULTIPLEXER	B-1	KVRDIP 16	86C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	19	N.R.	75/76	AU	TCVPC	139CY2.2G50X	5.00E 03		
9324	COMPARATOR	B-1	KVRFPK 16	95C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	32	N.R.	75/75	AU	TCVPC	114CY2.2G70X	4.08E 03		

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9324	COMPARATOR N.R.	B-1 32	KVRFPK 16 N.R.	95C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 5.16E 03	
9324	COMPARATOR N.R.	B-1 32	KVRFPK 16 N.R.	95C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 2.83E 03	
9324	COMPARATOR N.R.	B-1 32	KVRFPK 16 N.R.	49C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 5.41E 04	
9324	COMPARATOR N.R.	B-1 32	KVRFPK 16 N.R.	49C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 7.83E 03	
9324	COMPARATOR N.R.	B-1 32	KVRFPK 16 N.R.	49C 74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.33E 03	
						EQP OP	025C	/ 0 3.98E 03	
9324	COMPARATOR N.R.	B-1 32	KVRDIP 16 N.R.	74/75	PROCESS AU	FIELD G N.A.		/ 0 1.71E 03	
9324	COMPARATOR N.R.	B-1 32	KVRDIP 16 N.R.	71C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 6.30E 03	
9324	COMPARATOR N.R.	B-1 32	KVRDIP 16 N.R.	72/74	RECORDER AU	FIELD Q N.A.		/ 0 8.54E 03	
9324	COMPARATOR N.R.	B-1 32	KVRDIP 16 N.R.	91C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 4.94E 03	
9324	COMPARATOR N.R.	B-1 32	KVRDIP 16 N.R.	91C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 1.67E 03	
9334	LATCH ADDRESSABLE	B-1 59	KVRFPK 16 INORGANIC	105C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 9.19E 03	
9334	LATCH ADDRESSABLE	B-1 59	KVRFPK 16 INORGANIC	105C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 1.16E 04	
9334	LATCH ADDRESSABLE	B-1 59	KVRFPK 16 INORGANIC	105C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 6.36E 03	
9334	LATCH ADDRESSABLE	B-1 59	KVRDIP 16 N.R.	74/75	PROCESS AU	FIELD G N.A.		/ 0 1.71E 03	
9334	LATCH ADDRESSABLE	B-1 59	KVRDIP 16 N.R.	72/74	RECORDER AU	FIELD Q N.A.		/ 0 8.54E 03	
9334	LATCH ADDRESSABLE	B-1 59	KVRDIP 16 N.R.	99C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 4.94E 03	
9334	LATCH ADDRESSABLE	B-1 59	KVRDIP 16 N.R.	99C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 1.67E 03	
9334	LATCH ADDRESSABLE	NONE 59	EADIP 16 N.R.	74C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 2 1.14E 06	
9601	FLIPFLOP MONOSTABLE	A-1 8	KVRDIP 14 N.R.	40C 72/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.48E 05	
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	70C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 114CY2.2G70X	/ 0 1.02E 03	
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	70C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 141CY2.2G70X	/ 0 1.29E 03	
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	86C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 4.08E 03	
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	86C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 5.16E 03	
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	40C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.73E 06	

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	40C 74/74	SOMAR WSS	REL Q EQP OP	025C	/ 0 2.51E 05		
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRFPK 14 N.R.	74/74	SOMAR WSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 4.25E 04		
						EQP OP	025C	/ 0 1.27E 05		
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	66C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95%	/ 0 8.50E 03		
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	66C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95%	/ 0 7.14E 03		
9601	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	66C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95%	/ 0 1.24E 04		
9601	FLIPFLOP MONOSTABLE	N.R. 8	KVRDIP 14 N.R.	86C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G 81%	/ 0 1.20E 03		
9601	FLIPFLOP MONOSTABLE	N.R. 8	KVRDIP 14 N.R.	86C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81%	/ 0 4.26E 04		
9601	FLIPFLOP MONOSTABLE	N.R. 8	KVRDIP 14 N.R.	86C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81%	/ 0 4.42E 04		
9601	FLIPFLOP MONOSTABLE	N.R. 8	KVRDIP 14 N.R.	86C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81%	/ 0 9.41E 03		
9601	FLIPFLOP MONOSTABLE	NONE 8	KVRDIP 14 INORGANIC	150C 74/75	NA NA	LIFE V STGLIFE	150C	87/ 0 8.70E 04		
						EM		87/ 1 0.	1/DELTA	
9601	FLIPFLOP MONOSTABLE	NONE 8	KVRDIP 14 INORGANIC	140C 74/75	NA NA	LIFE V OP DYN	125C	210/ 0 2.10E 05		
						DYN EM		210/ 2 0.	2/DELTA	
9602	FLIPFLOP MONOSTABLE	B-1 14	KVRFPK 16 INORGANIC	85C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 114CY 2.2G 70%	/ 0 1.02E 03		
9602	FLIPFLOP MONOSTABLE	B-1 14	KVRFPK 16 INORGANIC	85C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 141CY 2.2G 70%	/ 0 3.87E 03		
9602	FLIPFLOP MONOSTABLE	B-1 14	KVRFPK 16 INORGANIC	85C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 78CY 2.2G 70%	/ 0 1.41E 03		
9602	FLIPFLOP MONOSTABLE	B-1 14	KVRFPK 16 INORGANIC	101C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY 2.2G 70%	/ 0 2.04E 03		
9602	FLIPFLOP MONOSTABLE	B-1 14	KVRFPK 16 INORGANIC	101C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY 2.2G 70%	/ 0 2.58E 03		
9602	FLIPFLOP MONOSTABLE	B-1 14	KVRFPK 16 INORGANIC	101C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G 70%	/ 0 1.41E 03		
9602	FLIPFLOP MONOSTABLE	B-1 18	KVRDIP 16 N.R.	29C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95%	/ 0 3.09E 03		
9602	FLIPFLOP MONOSTABLE	B-1 18	KVRDIP 16 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95%	/ 0 1.51E 04		
9602	FLIPFLOP MONOSTABLE	B-1 18	KVRDIP 16 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95%	/ 0 7.92E 03		

DIGITAL DEVICE DATA

GTE SYLVANIA TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1042	FLIPFLOP N.R.	NONE 8	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	30/ 0 1.50E 05		
						EM		30/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	75/ 0 7.50E 04		
						EM		75/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	15/ 0 1.50E 05		
						EM		15/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V OP CNST	085C	90/ 0 4.50E 05		
						EM		90/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V OP CNST	085C	225/ 0 2.25E 05		
						EM		225/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V OP CNST	085C	45/ 0 4.50E 05		
						EM		45/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	25/ 0 2.50E 04		
						EM		25/ 1 0.		
1042	FLIPFLOP N.R.	NONE 8	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	53/ 0 5.30E 04		
						EM		53/ 0 0.		
1042	FLIPFLOP N.R.	NONE 8	AUDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	25/ 0 1.25E 05		
						EM		25/ 0 0.		

DIGITAL DEVICE DATA

GTE SYLVANIA TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1042	FLIPFLOP	NONE	AUDIP 14	160C	NA	LIFE V	150C	50/ 0		
	N.R.	8	INORGANIC	/75	NA	STGLIFE		5.00E 05		
						EM		50/ 0		
								0.		
1042	FLIPFLOP	NONE	AUDIP 14	95C	NA	LIFE V	085C	122/ 0		
	N.R.	8	INORGANIC	/75	NA	OP CNST		1.22E 05		
						EM		122/ 0		
								0.		
1042	FLIPFLOP	NONE	AUDIP 14	95C	NA	LIFE V	085C	77/ 0		
	N.R.	8	INORGANIC	/75	NA	OP CNST		3.85E 05		
						EM		77/ 0		
								0.		
1042	FLIPFLOP	NONE	AUDIP 14	95C	NA	LIFE V	085C	154/ 0		
	N.R.	8	INORGANIC	/75	NA	OP CNST		1.54E 06		
						EM		154/ 0		
								0.		
1042	FLIPFLOP	NONE	AUDIP 14	95C	NA	LIFE V	085C	129/ 0		
	N.R.	8	INORGANIC	/75	NA	OP CNST		1.27E 05		
						EM		129/ 4		
								0.		
1043	FLIPFLOP	NONE	KVRDIP 14	160C	NA	LIFE V	150C	22/ 0		
	N.R.	8	INORGANIC	/75	NA	STGLIFE		1.10E 05		
						EM		22/ 0		
								0.		
1043	FLIPFLOP	NONE	KVRDIP 14	95C	NA	LIFE V	085C	76/ 0		
	N.R.	8	INORGANIC	/75	NA	OP CNST		3.80E 05		
						EM		76/ 0		
								0.		
1122	GATE	NONE	KVRDIP 14	160C	NA	LIFE V	150C	22/ 1		
	N.R.	4	INORGANIC	/75	NA	STGLIFE		1.06E 05		
						EM		21/ 0		
								0.		
1122	GATE	NONE	KVRDIP 14	160C	NA	LIFE V	150C	44/ 0		
	N.R.	4	INORGANIC	/75	NA	STGLIFE		4.40E 05		
						EM		44/ 0		
								0.		

DIGITAL DEVICE DATA

GTE SYLVANIA TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	22/ 2.10E 05	1 05
						EM		21/ 0.	0 1
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	22/ 1.10E 05	0 05
						EM		22/ 0.	0 1
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	415/ 4.15E 05	0 05
						EM		415/ 0.	0 1
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V RINGCNT	085C	38/ 3.60E 04	2 04
						EM		36/ 0.	0 1
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V RINGCNT	085C	38/ 1.90E 05	0 05
						EM		38/ 0.	0 1
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V RINGCNT	085C	76/ 7.60E 05	0 05
						EM		76/ 0.	0 1
1122	GATE N.R.	NONE 4	KVRDIP 14 INORGANIC	95C /75	NA NA	LIFE V RINGCNT	085C	465/ 4.65E 05	0 05
						EM		465/ 0.	0 1
1132	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	22/ 1.10E 05	0 05
						EM		22/ 0.	0 1
1132	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	160C /75	NA NA	LIFE V STGLIFE	150C	250/ 2.50E 05	0 05
						EM		250/ 0.	0 1

DIGITAL DEVICE DATA

GTE SYLVANIA TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP GATES	TEST PROTECT.	APPL. ENV.	TEST TYPE		PART HOURS	
11132	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	95C 775	NA NA	LIFE V RINGCNT	085C	38/ 0 3.80E 05	
						EM		38/ 0 0.	
11132	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	95C 775	NA NA	LIFE V RINGCNT	085C	271/ 0 2.71E 05	
						EM		271/ 0 0.	
11142	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	160C 775	NA NA	LIFE V STGLIFE	150C	91/ 0 9.10E 04	
						EM		91/ 0 0.	
11142	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	160C 775	NA NA	LIFE V STGLIFE	150C	22/ 0 1.10E 05	
						EM		22/ 0 0.	
11142	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	160C 775	NA NA	LIFE V STGLIFE	150C	22/ 1 1.03E 05	
						EM		21/ 1 0.	
11142	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	95C 775	NA NA	LIFE V RINGCNT	085C	38/ 1 1.90E 05	
						EM		37/ 1 0.	
11142	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	95C 775	NA NA	LIFE V RINGCNT	085C	38/ 0 1.88E 05	
						EM		38/ 1 0.	
11142	BUFFER N.R.	NONE 2	KVRDIP 14 INORGANIC	95C 775	NA NA	LIFE V RINGCNT	085C	114/ 0 1.14E 05	
						EM		114/ 0 0.	

HARRIS TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST	APPL.	TEST		PART		
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS		
1234	INVERTER	B-1	AUDIP 14			DISPLAY	FIELD Q	/ 0		
	N.R.	6	INORGANIC	72/74	AI	N.A.		5.97E 03		
1234	INVERTER	B-1	AUDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	74/75	AI	TCVPC	118CY2.2G53E	3.02E 03		

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
15400	GATE	A-2	KVRFPK 14	150C	NA	LIFE V	150C	52/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		5.20E 04		
15400	GATE	A-2	KVRFPK 14	130C	NA	LIFE V	125C	52/ 0		
	N.R.	4	N.R.	/75	NA	RINGCNT		5.20E 04		
15400	GATE	B-1	KVRFPK 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		5.50E 04		
15400	GATE	B-1	KVRFPK 14	130C	NA	LIFE V	125C	77/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT	100X	7.70E 04		
15400	GATE	B-2	KVRFPK 14	150C	NA	LIFE V	150C	50/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		5.00E 04		
15400	GATE	B-2	KVRFPK 14	130C	NA	LIFE V	125C	106/ 0		
	N.R.	4	N.R.	/75	NA	RINGCNT		1.06E 05		
15400	GATE	B-2	KVRDIP 14	130C	NA	LIFE V	125C	105/ 0		
	N.R.	4	N.R.	/75	NA	RINGCNT		1.05E 05		
15400	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	55/ 1	1/DEGRADED	
	N.R.	4	N.R.	/74	NA	STGLIFE		5.50E 04		
15400	GATE	C-1	KVRDIP 14	130C	NA	LIFE V	125C	77/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT	100X	7.70E 04		
15400	GATE	C-2	KVRDIP 14	130C	NA	LIFE V	125C	53/ 0		
	N.R.	4	N.R.	/75	NA	RINGCNT		5.30E 04		
15401	GATE	B-1	KVRFPK 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		5.50E 04		
15401	GATE	B-1	KVRFPK 14	130C	NA	LIFE V	125C	77/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT	100X	7.70E 04		
15401	GATE	B-2	KVRFPK 14	150C	NA	LIFE V	150C	105/ 0		
	N.R.	4	N.R.	/75	NA	STGLIFE		1.05E 05		
15401	GATE	B-2	KVRFPK 14	130C	NA	LIFE V	125C	106/ 0		
	N.R.	4	N.R.	/75	NA	RINGCNT		1.06E 05		
15401	GATE	C-1	KVRFPK 14	150C	NA	LIFE V	150C	81/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		8.10E 04		
15401	GATE	C-1	KVRFPK 14	130C	NA	LIFE V	125C	165/ 0		
	N.R.	4	N.R.	/74	NA	RINGCNT	100X	1.65E 05		
15401	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		5.50E 04		
15401	GATE	C-1	KVRDIP 14	125C	NA	LIFE U	125C	77/ 0		
	N.R.	4	N.R.	/74	NA	REVBias		7.70E 04		
15402	GATE	B-1	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0		
	N.R.	4	N.R.	/74	NA	STGLIFE		5.50E 04		

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100X	77/ 0 7.70E 04		
5402	GATE N.R.	B-2 4	KVRFPK 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	53/ 0 5.50E 04		
5402	GATE N.R.	B-2 4	KVRFPK 14 N.R.	131C /75	NA NA	LIFE V RINGCNT	125C	38/ 0 3.80E 04		
5402	GATE N.R.	C-1 4	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	52/ 0 5.20E 04		
5402	GATE N.R.	C-1 4	KVRFPK 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100X	176/ 1 1.76E 05		
5402	GATE N.R.	C-1 4	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	34/ 0 3.40E 04		
5402	GATE N.R.	C-1 4	KVRDIP 14 N.R.	131C /74	NA NA	LIFE V RINGCNT	125C 100X	105/ 0 1.05E 05		
5403	GATE N.R.	B-1 4	KVRDIP 14 N.R.	125C /74	NA NA	LIFE V STGLIFE	125C 100X	176/ 0 1.76E 05		
5403	GATE N.R.	B-1 4	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	52/ 0 5.20E 04		
5404	INVERTER N.R.	B-1 6	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	63/ 0 6.50E 04		
5404	INVERTER N.R.	B-1 6	KVRFPK 14 N.R.	132C /74	NA NA	LIFE V RINGCNT	125C 100X	111/ 0 1.11E 05		
5404	INVERTER N.R.	B-2 6	KVRFPK 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04		
5404	INVERTER N.R.	C-1 6	KVRDIP 14 N.R.	150C /74	NA NA	LIFE U STGLIFE	150C	55/ 0 5.50E 04		
5404	INVERTER N.R.	C-1 6	KVRDIP 14 N.R.	132C /74	NA NA	LIFE V RINGCNT	125C 100X	77/ 0 7.70E 04		
5404	INVERTER N.R.	C-2 6	KVRDIP 14 N.R.	132C /75	NA NA	LIFE V RINGCNT	125C	53/ 1 5.30E 04		
5404	INVERTER N.R.	NONE 6	KVRDIP 14 N.R.	132C /75	NA NA	LIFE V RINGCNT	125C	22/ 0 2.20E 04		
5405	INVERTER N.R.	B-1 6	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	11/ 0 1.10E 04		
5405	INVERTER N.R.	B-1 6	KVRFPK 14 N.R.	132C /74	NA NA	LIFE V RINGCNT	125C 100X	35/ 0 3.50E 04		
5405	INVERTER N.R.	B-2 6	KVRFPK 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04		

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5403	INVERTER N.R.	B-2 6	KVRFPK 14 N.R.	132C /75	NA	LIFE V RINGCNT	125C	22/ 0 2.20E 04			
5403	INVERTER N.R.	C-1 6	KVRFPK 14 N.R.	150C /74	NA	LIFE U STGLIFE	150C	55/ 0 5.50E 04			
5403	INVERTER N.R.	C-1 6	KVRFPK 14 N.R.	132C /74	NA	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04			
5403	INVERTER N.R.	C-2 6	KVRFPK 14 N.R.	150C /75	NA	LIFE V STGLIFE	150C	22/ 0 2.20E 04			
5403	INVERTER N.R.	C-2 6	KVRFPK 14 N.R.	132C /75	NA	LIFE V RINGCNT	125C	52/ 1 5.20E 04			
5410	GATE N.R.	B-1 3	KVRFPK 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	25/ 0 2.50E 04			
5410	GATE N.R.	B-1 3	KVRFPK 14 N.R.	129C /74	NA	LIFE V RINGCNT	125C 100%	88/ 0 8.80E 04			
5410	GATE N.R.	B-1 3	KVRFPK 14 INORGANIC	225C 73/75	NA	LIFE Q ACC RB	225C V 100%	35/ 1 1.36E 05	1/ OPEN		
						ACC RB	285C V 100%	34/ 5 6.70E 04	1/CATASTROPHIC: METAL		
									TEMPERATURE		
									4/CATASTROPHIC: METAL		
									TEMPERATURE		
5410	GATE N.R.	B-2 3	KVRFPK 14 N.R.	150C /75	NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04			
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	225C 73/75	NA	LIFE Q STGLIFE	225C	25/ 0 1.00E 05			
						STGLIFE	285C	25/ 0 5.00E 04			
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	129C 73/75	NA	LIFE Q OP DYN	125C 100%	70/ 1 4.17E 05	1/DEGRADED		
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	200C 73/75	NA	LIFE Q ACC RB	200C V 100%	35/ 1 2.07E 05			
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	200C 73/75	NA	LIFE Q ACC RB	200C V 100%	35/ 0 1.40E 05			
						ACC RB	270C V 100%	35/ 0 7.00E 04			
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	225C 73/75	NA	LIFE Q ACC RB	225C V 100%	35/ 0 2.10E 05			
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	225C 73/75	NA	LIFE Q ACC RB	225C V 50%	35/ 0 2.10E 05			

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ITT TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5410	GATE N.R.	C-1 3	KVRFPK 14 INORGANIC	250C 73/75	NA NA	LIFE Q ACC RB	250C V 100%	35/ 4 1.94E 05	1/SHORT WIRE BOND APPLICATION WORKMANSHIP 1/DEGRADED METAL PROCESS CONT		
5410	GATE N.R.	C-1 3	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	92/ 0 9.20E 04			
5410	GATE N.R.	C-1 3	KVRDIP 14 N.R.	129C /74	NA NA	LIFE V RINGCNT	125C 100%	157/ 0 1.57E 05			
5410	GATE N.R.	C-2 3	KVRDIP 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	12/ 0 1.20E 04			
54121	FLIPPLOP MONOSTABLE	A-2 8	KVRFPK 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	52/ 0 5.20E 04			
54121	FLIPPLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	61C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62%	/ 0 2.74E 04			
54121	FLIPPLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	61C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62%	/ 0 3.59E 04			
54121	FLIPPLOP MONOSTABLE	B-2 8	KVRDIP 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	30/ 0 3.00E 04			
54121	FLIPPLOP MONOSTABLE	B-2 8	KVRDIP 14 N.R.	136C /75	NA NA	LIFE V RINGCNT	125C	30/ 0 3.00E 04			
54151	MULTIPLEXER N.R.	B-2 17	KVRFPK 16 N.R.	142C /75	NA NA	LIFE V RINGCNT	125C	55/ 0 5.50E 04			
54151	MULTIPLEXER N.R.	D.O. 17	KVRFPK 16 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04			
54157	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	105/ 0 1.05E 05			
54157	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 N.R.	140C /74	NA NA	LIFE V RINGCNT	125C 100%	176/ 0 1.76E 05			
5420	GATE N.R.	B-1 2	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	10/ 0 1.00E 04			
5420	GATE N.R.	B-1 2	KVRFPK 14 N.R.	127C /74	NA NA	LIFE V RINGCNT	125C 100%	36/ 0 3.60E 04			
5420	GATE N.R.	B-2 2	KVRFPK 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04			
5420	GATE N.R.	C-1 2	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04			
5420	GATE N.R.	C-1 2	KVRFPK 14 N.R.	127C /74	NA NA	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04			

DIGITAL DEVICE DATA

ITT TTL		:MANUFACTURER :OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCR.N. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS	
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:	
: 5420	: GATE	: NONE	: EADIP 14	: 150C	: NA	: LIFE V	: 150C	: 35/ 0	:	
:	: N.R.	: 2	: N.R.	: /75	: NA	: STGLIFE	:	: 5.50E 04	:	
: 5420	: GATE	: NONE	: EADIP 14	: 85C	: NA	: LIFE V	: 085C 85ZRH	: 75/ 0	:	
:	: N.R.	: 2	: N.R.	: /75	: NA	: HUMLIFE	:	: 3.75E 04	:	
: 5430	: GATE	: B-1	: KVRFPK 14	: 150C	: NA	: LIFE V	: 150C	: 55/ 0	:	
:	: N.R.	: 1	: N.R.	: /74	: NA	: STGLIFE	:	: 5.50E 04	:	
: 5430	: GATE	: B-1	: KVRFPK 14	: 126C	: NA	: LIFE V	: 125C 100%	: 77/ 0	:	
:	: N.R.	: 1	: N.R.	: /74	: NA	: RINGCNT	:	: 7.70E 04	:	
: 5430	: GATE	: B-1	: KVRDIP 14	: 150C	: NA	: LIFE V	: 150C	: 215/ 0	:	
:	: N.R.	: 1	: N.R.	: /74	: NA	: STGLIFE	:	: 2.15E 05	:	
: 5430	: GATE	: B-2	: KVRFPK 14	: 150C	: NA	: LIFE V	: 150C	: 105/ 0	:	
:	: N.R.	: 1	: N.R.	: /75	: NA	: STGLIFE	:	: 1.05E 05	:	
: 5430	: GATE	: B-2	: KVRFPK 14	: 126C	: NA	: LIFE V	: 125C	: 106/ 0	:	
:	: N.R.	: 1	: N.R.	: /75	: NA	: RINGCNT	:	: 1.06E 05	:	
: 5430	: GATE	: C-1	: KVRFPK 14	: 150C	: NA	: LIFE V	: 150C	: 26/ 0	:	
:	: N.R.	: 1	: N.R.	: /74	: NA	: STGLIFE	:	: 2.60E 04	:	
: 5430	: GATE	: C-1	: KVRFPK 14	: 126C	: NA	: LIFE V	: 125C 100%	: 88/ 0	:	
:	: N.R.	: 1	: N.R.	: /74	: NA	: RINGCNT	:	: 8.80E 04	:	
: 5430	: GATE	: C-1	: KVRDIP 14	: 125C	: NA	: LIFE U	: 125C	: 444/ 0	:	
:	: N.R.	: 1	: N.R.	: /74	: NA	: REVBIA	:	: 4.44E 05	:	
: 5440	: BUFFER	: B-1	: KVRDIP 14	: 150C	: NA	: LIFE V	: 150C	: 52/ 0	:	
:	: N.R.	: 2	: N.R.	: /74	: NA	: STGLIFE	:	: 5.20E 04	:	
: 5440	: BUFFER	: B-1	: KVRDIP 14	: 133C	: NA	: LIFE V	: 125C 100%	: 77/ 0	:	
:	: N.R.	: 2	: N.R.	: /74	: NA	: RINGCNT	:	: 7.70E 04	:	
: 5440	: BUFFER	: C-1	: KVRDIP 14	: 150C	: NA	: LIFE V	: 150C	: 89/ 0	:	
:	: N.R.	: 2	: N.R.	: /74	: NA	: STGLIFE	:	: 8.90E 04	:	
: 5440	: BUFFER	: C-1	: KVRDIP 14	: 133C	: NA	: LIFE V	: 125C 100%	: 182/ 0	:	
:	: N.R.	: 2	: N.R.	: /74	: NA	: RINGCNT	:	: 1.82E 05	:	
: 5442	: DECODER	: B-1	: KVRFPK 16	: 150C	: NA	: LIFE V	: 150C	: 105/ 0	:	
:	: N.R.	: 18	: N.R.	: /74	: NA	: STGLIFE	:	: 1.05E 05	:	
: 5442	: DECODER	: B-1	: KVRFPK 16	: 142C	: NA	: LIFE V	: 125C 100%	: 176/ 1	:	
:	: N.R.	: 18	: N.R.	: /74	: NA	: RINGCNT	:	: 1.76E 05	:	
: 5442	: DECODER	: B-2	: KVRFPK 16	: 150C	: NA	: LIFE V	: 150C	: 55/ 0	:	
:	: N.R.	: 18	: N.R.	: /75	: NA	: STGLIFE	:	: 5.50E 04	:	
: 5450	: GATE	: A-2	: KVRFPK 14	: 150C	: NA	: LIFE V	: 150C	: 32/ 0	:	
:	: N.R.	: 6	: N.R.	: /75	: NA	: STGLIFE	:	: 3.20E 04	:	
: 5450	: GATE	: A-2	: KVRFPK 14	: 129C	: NA	: LIFE V	: 125C	: 32/ 0	:	
:	: N.R.	: 6	: N.R.	: /75	: NA	: RINGCNT	:	: 3.20E 04	:	

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ITT
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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5450	GATE	B-1	KVRDIP 14	150C	NA	LIFE V	150C	70/ 0	
	N.R.	6	N.R.	/74	NA	STGLIFE		7.00E 04	
5450	GATE	B-1	KVRDIP 14	129C	NA	LIFE V	123C 100X	121/ 0	
	N.R.	6	N.R.	/74	NA	RINGCNT		1.21E 05	
5450	GATE	C-1	KVRFPK 14	150C	NA	LIFE V	150C	55/ 0	
	N.R.	6	N.R.	/74	NA	STGLIFE		5.50E 04	
5450	GATE	C-1	KVRFPK 14	129C	NA	LIFE V	123C 100X	77/ 0	
	N.R.	6	N.R.	/74	NA	RINGCNT		7.70E 04	
5450	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0	
	N.R.	6	N.R.	/74	NA	STGLIFE		5.50E 04	
5450	GATE	C-1	KVRDIP 14	129C	NA	LIFE V	123C 100X	77/ 0	
	N.R.	6	N.R.	/74	NA	RINGCNT		7.70E 04	
5450	GATE	C-2	KVRFPK 14	150C	NA	LIFE V	150C	55/ 0	
	N.R.	6	N.R.	/75	NA	STGLIFE		5.50E 04	
5453	GATE	B-1	KVRFPK 14	150C	NA	LIFE V	150C	68/ 0	
	N.R.	5	N.R.	/74	NA	STGLIFE		6.80E 04	
5453	GATE	B-1	KVRFPK 14	131C	NA	LIFE V	123C 100X	121/ 0	
	N.R.	5	N.R.	/74	NA	RINGCNT		1.21E 05	
5454	GATE	B-1	KVRDIP 14	150C	NA	LIFE V	150C	68/ 0	
	N.R.	5	N.R.	/74	NA	STGLIFE		6.80E 04	
5454	GATE	B-1	KVRDIP 14	128C	NA	LIFE V	123C 100X	121/ 0	
	N.R.	5	N.R.	/74	NA	RINGCNT		1.21E 05	
5470	FLIPFLOP	B-1	KVRDIP 14	150C	NA	LIFE V	150C	117/ 0	
	JK	11	N.R.	/74	NA	STGLIFE		1.17E 05	
5470	FLIPFLOP	B-1	KVRDIP 14	133C	NA	LIFE V	123C 100X	253/ 0	
	JK	11	N.R.	/74	NA	RINGCNT		2.53E 05	
5472	FLIPFLOP	B-1	KVRDIP 14	150C	NA	LIFE V	150C	72/ 0	
	JK	10	N.R.	/74	NA	STGLIFE		7.20E 04	
5472	FLIPFLOP	B-1	KVRDIP 14	131C	NA	LIFE V	123C 100X	135/ 0	
	JK	10	N.R.	/74	NA	RINGCNT		1.35E 05	
5472	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE V	150C	34/ 0	
	JK	10	N.R.	/74	NA	STGLIFE		3.40E 04	
5472	FLIPFLOP	C-1	KVRDIP 14	131C	NA	LIFE V	123C 100X	105/ 0	
	JK	10	N.R.	/74	NA	RINGCNT		1.05E 05	
5472	FLIPFLOP	C-2	KVRDIP 14	131C	NA	LIFE V	123C	25/ 0	
	JK	10	N.R.	/75	NA	RINGCNT		2.50E 04	
5473	FLIPFLOP	A-2	KVRFPK 14	150C	NA	LIFE V	150C	15/ 0	
	JK	20	N.R.	/75	NA	STGLIFE		1.50E 04	

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ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5473	FLIPFLOP JK	A-2 20	KVRFPK 14 N.R.	137C /75	NA	LIFE V RINGCNT	125C	29/ 0 2.90E 04	
5473	FLIPFLOP JK	B-1 20	KVRFPK 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	77/ 0 7.70E 04	
5473	FLIPFLOP JK	B-1 20	KVRFPK 14 N.R.	137C /74	NA	LIFE V RINGCNT	125C 100X	176/ 0 1.76E 05	
5473	FLIPFLOP JK	B-1 20	KVRDIP 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
5473	FLIPFLOP JK	B-1 20	KVRDIP 14 N.R.	137C /74	NA	LIFE V RINGCNT	125C 100X	77/ 0 7.70E 04	
5473	FLIPFLOP JK	C-1 20	KVRDIP 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	130/ 0 1.30E 05	
5473	FLIPFLOP JK	C-1 20	KVRDIP 14 N.R.	137C /74	NA	LIFE V RINGCNT	125C 100X	77/ 0 7.70E 04	
5474	FLIPFLOP D	B-1 12	KVRDIP 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	52/ 0 5.20E 04	
5474	FLIPFLOP D	B-1 12	KVRDIP 14 N.R.	135C /74	NA	LIFE V RINGCNT	125C 100X	77/ 0 7.70E 04	
5474	FLIPFLOP D	C-1 12	KVRDIP 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	222/ 1 1.82E 05	1/DEGRADED
5474	FLIPFLOP D	C-1 12	KVRDIP 14 N.R.	135C /74	NA	LIFE V RINGCNT	125C 100X	290/ 1 2.90E 05	1/DEGRADED
5474	FLIPFLOP D	C-2 12	KVRDIP 14 N.R.	135C /75	NA	LIFE V RINGCNT	125C	52/ 2 5.20E 04	
5476	FLIPFLOP JK	B-1 16	KVRDIP 16 N.R.	150C /74	NA	LIFE V STGLIFE	150C	52/ 0 5.20E 04	
5476	FLIPFLOP JK	B-1 16	KVRDIP 16 N.R.	145C /74	NA	LIFE V RINGCNT	125C 100X	176/ 0 1.76E 05	
5482	ADDER BINARY	B-1 21	KVRFPK 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	124/ 0 1.24E 05	
5482	ADDER BINARY	B-1 21	KVRFPK 14 N.R.	146C /74	NA	LIFE V RINGCNT	125C 100X	221/ 0 2.21E 05	
5482	ADDER BINARY	B-2 21	KVRFPK 14 N.R.	150C /75	NA	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
5490	COUNTER DECADE	C-1 15	KVRDIP 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
5490	COUNTER DECADE	C-1 15	KVRDIP 14 N.R.	144C /74	NA	LIFE V RINGCNT	125C 100X	105/ 0 1.05E 05	
5492	COUNTER N.R.	C-1 26	KVRDIP 14 N.R.	150C /74	NA	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
5492	COUNTER N.R.	C-1 26	KVRDIP 14 N.R.	144C /74	NA	LIFE V RINGCNT	125C 100X	105/ 0 1.05E 05	

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
15492	COUNTER	C-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	N.R.	26	N.R.	/75	NA	STGLIFE		2.20E 04	
15493	COUNTER	B-1	KVRFPK 14	144C	NA	LIFE V	125C	185/ 0	
	BINARY	25	IMORGANIC	75/75	NA	RINGCNT		1.85E 05	
						EM	025C	185/ 0	
						EM	125C	185/ 1	1/DEGRADED
						EM	-055C	184/ 0	
								0.	
15494	SHIFT REG	B-2	KVRFPK 16	150C	NA	LIFE V	150C	22/ 0	
	N.R.	16	N.R.	/75	NA	STGLIFE		2.20E 04	
15494	SHIFT REG	B-2	KVRFPK 16	146C	NA	LIFE V	125C	55/ 0	
	N.R.	16	N.R.	/75	NA	RINGCNT		5.50E 04	
7400	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	105/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		1.05E 05	
7400	GATE	B-2	KVRDIP 14	130C	NA	LIFE V	125C	105/ 0	
	N.R.	4	N.R.	/75	NA	RINGCNT		1.05E 05	
7400	GATE	C-2	KVRDIP 14	150C	NA	LIFE V	150C	52/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		5.20E 04	
7400	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	188/ 1	
	N.R.	4	N.R.	/75	NA	STGLIFE		1.14E 05	
7400	GATE	NONE	KVRDIP 14	130C	NA	LIFE V	125C	162/ 2	
	N.R.	4	N.R.	/75	NA	RINGCNT		1.58E 05	
7400	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0	
	N.R.	4	N.R.	72/75	NA	STGLIFE		1.90E 04	
						RHRB	085C 851RH	25/ 0	
								1.25E 04	
7400	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	207/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		2.07E 05	
7400	GATE	NONE	EADIP 14	130C	NA	LIFE V	125C	1326/ 0	
	N.R.	4	N.R.	/75	NA	RINGCNT		5.83E 06	
7401	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	21/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		2.10E 04	
7401	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C 851RH	52/ 0	
	N.R.	4	N.R.	/75	NA	HUMLIFE		2.60E 04	
7402	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 851RH	50/ 0	
	N.R.	4	N.R.	72/75	NA	RHRB		5.00E 04	
7403	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	11/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		1.10E 04	
7404	INVERTER	NONE	EADIP 14	125C	NA	LIFE U	125C	25/ 0	
	N.R.	6	N.R.	72/75	NA	REVBIA		1.88E 04	
						RHRB	085C 851RH	25/ 0	
								6.25E 03	

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
7405	INVERTER	C-1	KVRDIP 14	150C	NA	LIFE V	150C	75/ 0			
	N.R.	6	N.R.	/74	NA	STGLIFE		7.50E 04			
7405	INVERTER	C-2	KVRDIP 14	132C	NA	LIFE V	125C	52/ 1			
	N.R.	6	N.R.	/75	NA	RINGCNT		5.20E 04			
7408	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 1			
	N.R.	4	N.R.	72/75	NA	RHRB		2.50E 04			
7409	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0			
	N.R.	4	N.R.	72/75	NA	STGLIFE		3.80E 04			
7409	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0			
	N.R.	4	N.R.	72/75	NA	RHRB		2.50E 04			
7410	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	105/ 0			
	N.R.	3	N.R.	/75	NA	STGLIFE		1.05E 05			
7410	GATE	NONE	EADIP 14	125C	NA	LIFE U	125C	25/ 0			
	N.R.	3	N.R.	72/75	NA	REVBias		2.50E 04			
7410	GATE	NONE	EADIP 14	129C	NA	LIFE V	125C	52/ 0			
	N.R.	3	N.R.	/75	NA	RINGCNT		5.20E 04			
74150	MULTIPLEXER	NONE	EADIP 24	85C	NA	LIFE V	085C 85XRH	52/ 1			
	N.R.	26	N.R.	/75	NA	HUMLIFE		2.60E 04			
74151	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 1			
	N.R.	12	N.R.	72/75	NA	RHRB		1.25E 04			
74153	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 4			
	N.R.	16	N.R.	72/75	NA	RHRB		2.50E 04			
74157	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0			
	N.R.	15	N.R.	72/75	NA	RHRB		2.50E 04			
74161	COUNTER	NONE	KVRDIP 16	156C	NA	LIFE V	125C	52/ 0			
	N.R.	57	N.R.	/75	NA	RINGCNT		5.20E 04			
7420	GATE	B-2	KVRDIP 14	150C	NA	LIFE V	150C	55/ 0			
	N.R.	2	N.R.	/75	NA	STGLIFE		2.50E 04			
7420	GATE	B-2	KVRDIP 14	127C	NA	LIFE V	125C	55/ 0			
	N.R.	2	N.R.	/75	NA	RINGCNT		1.15E 05			
7420	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0			
	N.R.	2	N.R.	72/75	NA	STGLIFE		1.90E 04			
						RHRB	085C 85XRH	25/ 0			
								1.25E 04			
7430	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	23/ 0			
	N.R.	1	N.R.	/75	NA	STGLIFE		2.30E 04			
7430	GATE	NONE	EADIP 14	85C	NA	LIFE V	085C 85XRH	52/ 0			
	N.R.	1	N.R.	/75	NA	HUMLIFE		2.60E 04			

DIGITAL DEVICE DATA

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:MANUFACTURER
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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7430	GATE	NONE	EADIP 14	126C	NA	LIFE V	125C	52/ 0	
	N.R.	1	N.R.	/75	NA	RINGCNT		5.20E 04	
7437	BUFFER	NONE	KVRDIP 14	150C	NA	LIFE V	150C	38/ 0	
	N.R.	4	N.R.	/75	NA	STGLIFE		3.90E 04	
7437	BUFFER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0	
	N.R.	4	N.R.	72/75	NA	RHRB		2.50E 04	
7440	BUFFER	B-2	KVRDIP 14	150C	NA	LIFE V	150C	105/ 0	
	N.R.	2	N.R.	/75	NA	STGLIFE		1.05E 05	
7440	BUFFER	B-2	KVRDIP 14	131C	NA	LIFE V	125C	105/ 1	
	N.R.	2	N.R.	/75	NA	RINGCNT		1.05E 05	
7440	BUFFER	NONE	EADIP 14	125C	NA	LIFE U	125C	25/ 1	
	N.R.	2	N.R.	72/75	NA	REVBias		2.50E 04	
7450	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	72/ 0	
	EXPANDABLE	6	N.R.	/74	NA	STGLIFE		7.20E 04	
7450	GATE	NONE	KVRDIP 14	128C	NA	LIFE V	125C 100%	105/ 1	1/DEGRADED
	EXPANDABLE	6	N.R.	/74	NA	RINGCNT		1.05E 05	
7450	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	105/ 0	
	EXPANDABLE	6	N.R.	/75	NA	STGLIFE		1.05E 05	
7450	GATE	NONE	EADIP 14	128C	NA	LIFE V	125C	105/ 0	
	EXPANDABLE	6	N.R.	/75	NA	RINGCNT		1.05E 05	
7451	GATE	NONE	EADIP 14	150C	NA	LIFE V	150C	11/ 0	
	N.R.	6	N.R.	/75	NA	STGLIFE		1.10E 04	
7451	GATE	NONE	EADIP 14	125C	NA	LIFE U	125C	25/ 0	
	N.R.	6	N.R.	72/75	NA	REVBias		1.88E 04	
7451	GATE	NONE	EADIP 14	129C	NA	LIFE V	125C	105/ 0	
	N.R.	6	N.R.	/75	NA	RINGCNT		5.25E 04	
7453	GATE	NONE	KVRDIP 14	150C	NA	LIFE V	150C	38/ 0	
	N.R.	5	N.R.	/75	NA	STGLIFE		3.80E 04	
7453	GATE	NONE	KVRDIP 14	128C	NA	LIFE V	125C	52/ 0	
	N.R.	5	N.R.	/75	NA	RINGCNT		5.20E 04	
7453	GATE	NONE	EADIP 14	70C	NA	LIFE U	070C	25/ 1	
	N.R.	5	N.R.	72/75	NA	REVBias		2.50E 04	
7472	FLIPFLOP	B-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	JK	10	N.R.	/75	NA	STGLIFE		2.20E 04	
7472	FLIPFLOP	B-2	KVRDIP 14	131C	NA	LIFE V	125C	22/ 0	
	JK	10	N.R.	/75	NA	RINGCNT		2.20E 04	
7472	FLIPFLOP	NONE	EADIP 14	150C	NA	LIFE V	150C	105/ 0	
	JK	10	N.R.	/75	NA	STGLIFE		1.05E 05	

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ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7472	FLIPFLOP JK	NONE 10	EADIP 14 N.R.	131C /75	NA NA	LIFE V RINGCNT	125C	105/ 0 1.05E 05	
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	180/ 1 1.80E 05	
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	85C /75	NA NA	LIFE V HUMLIFE	085C	102/ 0 5.10E 04	85ZRH
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	125C 72/75	NA NA	LIFE U REVBias	125C	25/ 0 2.50E 04	
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	135C /75	NA NA	LIFE V RINGCNT	125C	157/ 2 1.57E 05	
7475	LATCH BISTABLE	NONE 24	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C	25/ 0 2.50E 04	85ZRH
7476	FLIPFLOP JK	NONE 16	EADIP 16 N.R.	85C /75	NA NA	LIFE V HUMLIFE	085C	105/ 2 5.25E 04	85ZRH
7490	COUNTER DECADE	NONE 15	EADIP 14 N.R.	85C /75	NA NA	LIFE V HUMLIFE	085C	105/ 1 5.25E 04	85ZRH
7490	COUNTER DECADE	NONE 15	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C	25/ 4 2.50E 04	85ZRH
7493	COUNTER BINARY	NONE 25	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C	25/ 0 2.50E 04	85ZRH
7495A	SHIFT REG N.R.	NONE 37	EADIP 14 N.R.	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 1.90E 04	
						RHRB	085C	25/ 0 1.25E 04	85ZRH
7495A	SHIFT REG N.R.	NONE 37	EADIP 14 N.R.	125C 72/75	NA NA	LIFE U REVBias	125C	25/ 1 1.25E 04	
7495A	SHIFT REG N.R.	NONE 37	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C	25/ 0 6.25E 03	85ZRH
9000	FLIPFLOP JK	C-1 6	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	75/ 0 7.50E 04	
9001	FLIPFLOP JK	NONE 13	KVRDIP 14 N.R.	150C 72/74	NA NA	LIFE V STGLIFE	150C	75/ 1 7.50E 04	
9001	FLIPFLOP JK	NONE 13	KVRDIP 14 N.R.	133C 72/74	NA NA	LIFE V RINGCNT	125C	105/ 0 1.05E 05	100X
9004	GATE N.R.	C-1 2	KVRDIP 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	75/ 0 7.50E 04	
9004	GATE N.R.	C-1 2	KVRDIP 14 N.R.	128C /74	NA NA	LIFE V RINGCNT	125C	105/ 0 1.05E 05	100X

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ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9004	GATE	C-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	N.R.	2	N.R.	/75	NA	STGLIFE		2.20E 04	
9005	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	75/ 0	
	N.R.	6	N.R.	/74	NA	STGLIFE		7.50E 04	
9005	GATE	C-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0	
	N.R.	6	N.R.	/75	NA	STGLIFE		2.20E 04	
9005	GATE	C-2	KVRDIP 14	130C	NA	LIFE V	125C	52/ 0	
	N.R.	6	N.R.	/75	NA	RINGCNT		5.20E 04	
9007	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	36/ 0	
	N.R.	1	N.R.	/74	NA	STGLIFE		3.60E 04	
9007	GATE	C-1	KVRDIP 14	126C	NA	LIFE V	125C 100X	52/ 0	
	N.R.	1	N.R.	/74	NA	RINGCNT		5.20E 04	
9008	GATE	C-1	KVRDIP 14	150C	NA	LIFE V	150C	38/ 0	
	N.R.	5	N.R.	/74	NA	STGLIFE		3.80E 04	
9008	GATE	C-1	KVRDIP 14	130C	NA	LIFE V	125C 100X	52/ 0	
	N.R.	5	N.R.	/74	NA	RINGCNT		5.20E 04	
9016	INVERTER	C-1	KVRDIP 14	150C	NA	LIFE V	150C	38/ 0	
	N.R.	6	N.R.	/74	NA	STGLIFE		3.80E 04	
9016	INVERTER	C-1	KVRDIP 14	133C	NA	LIFE V	125C 100X	52/ 0	
	N.R.	6	N.R.	/74	NA	RINGCNT		5.20E 04	
9024	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE V	150C	34/ 0	
	JK	16	N.R.	/74	NA	STGLIFE		3.40E 04	
9024	FLIPFLOP	C-1	KVRDIP 14	142C	NA	LIFE V	125C 100X	105/ 0	
	JK	16	N.R.	/74	NA	RINGCNT		1.05E 05	
9300	SHIFT REG	B-2	KVRDIP 16	150C	NA	LIFE V	150C	105/ 0	
	N.R.	40	N.R.	/75	NA	STGLIFE		1.05E 05	
9300	SHIFT REG	NONE	EADIP 16	150C	NA	LIFE V	150C	113/ 0	
	N.R.	40	N.R.	/75	NA	STGLIFE		1.33E 05	
9300	SHIFT REG	NONE	EADIP 16	85C	NA	LIFE V	085C 85XRH	52/ 0	
	N.R.	40	N.R.	/75	NA	HUMLIFE		2.60E 04	
9300	SHIFT REG	NONE	EADIP 16	161C	NA	LIFE V	125C	52/ 0	
	N.R.	40	N.R.	/75	NA	RINGCNT		5.20E 04	
9301	DECODER	C-1	KVRDIP 16	150C	NA	LIFE V	150C	34/ 0	
	BCD/DECIMAL	18	N.R.	/74	NA	STGLIFE		3.40E 04	
9301	DECODER	C-1	KVRDIP 16	140C	NA	LIFE V	125C 100X	105/ 1	1/DEGRADED
	BCD/DECIMAL	18	N.R.	/74	NA	RINGCNT		1.05E 05	
9316	COUNTER	B-2	KVRFPK 16	161C	NA	LIFE V	125C	11/ 0	
	BINARY	57	N.R.	/75	NA	RINGCNT		1.10E 04	

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ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS			
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS				
9601	FLIPFLOP	B-2	KVRDIP 14	150C	NA	LIFE V	150C	22/ 0				
	MONOSTABLE	8	N.R.	/75	NA	STGLIFE		2.20E 04				
9601	FLIPFLOP	B-2	KVRDIP 14	135C	NA	LIFE V	125C	22/ 0				
	MONOSTABLE	8	N.R.	/75	NA	RINGCNT		2.20E 04				
9601	FLIPFLOP	C-1	KVRFPK 14	150C	NA	LIFE V	150C	38/ 0				
	MONOSTABLE	8	N.R.	/74	NA	STGLIFE		3.80E 04				
9601	FLIPFLOP	C-1	KVRFPK 14	135C	NA	LIFE V	125C 100X	38/ 0				
	MONOSTABLE	8	N.R.	/74	NA	RINGCNT		3.80E 04				
9601	FLIPFLOP	C-1	KVRDIP 14	150C	NA	LIFE V	150C	208/ 0				
	MONOSTABLE	8	N.R.	/74	NA	STGLIFE		2.08E 05				
9601	FLIPFLOP	C-1	KVRDIP 14	135C	NA	LIFE V	125C 100X	259/ 0				
	MONOSTABLE	8	N.R.	/74	NA	RINGCNT		2.59E 05				
9601	FLIPFLOP	C-2	KVRFPK 14	150C	NA	LIFE V	150C	34/ 1				
	MONOSTABLE	8	N.R.	/75	NA	STGLIFE		3.40E 04				
9601	FLIPFLOP	C-2	KVRFPK 14	135C	NA	LIFE V	125C	34/ 1				
	MONOSTABLE	8	N.R.	/75	NA	RINGCNT		3.40E 04				
9601	FLIPFLOP	C-2	KVRDIP 14	135C	NA	LIFE V	125C	55/ 1				
	MONOSTABLE	8	N.R.	/75	NA	RINGCNT		5.50E 04				

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MOTOROLA TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST PROTECT.	APPL. DATE	TEST ENV.			PART HOURS		
4024	FLIPFLOP	NONE	EADIP 14	50C	DISPLAY	FIELD U	040C 55XPWR	/ 7			
	N.R.	9	INORGANIC	75/77	GBC	N.A.		1.80E 07			
4306	DECODER	B-1	KVRFPK 14	42C	DIG PROC	CHECK Q	025C	/ 0			
	N.R.	15	INORGANIC	73/75	AI	EQP OP		3.21E 07			
4306	DECODER	B-1	KVRFPK 14	71C	DIG PROC	REL Q	-069C 054C	/ 0			
	N.R.	15	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.23E 05			
4306	DECODER	B-1	KVRFPK 14		DIG PROC	FIELD Q		/ 0			
	N.R.	15	INORGANIC	72/74	AU	N.A.		9.90E 04			
4306	DECODER	B-1	KVRFPK 14		DIG PROC	FIELD G		/ 0			
	N.R.	15	INORGANIC	74/76	AU	N.A.		5.11E 05			
4306	DECODER	B-1	KVRFPK 14	88C	DIG PROC	REL Q	-054C 071C	/ 0			
	N.R.	15	INORGANIC	/74	AU	TCVPC	178CY1.2G65X	9.84E 04			
4324	FLIPFLOP	B-1	KVRDIP 14	40C	COMMUNIC	FIELD Q	025C	/ 0			
	N.R.	16	INORGANIC	75/76	GT	N.A.		2.97E 04			
4324	FLIPFLOP	B-1	KVRDIP 14	66C	COMMUNIC	REL G	004C 051C	/ 0			
	N.R.	16	INORGANIC	75/75	GT	EQP OP	16CY 95X	3.09E 03			
4324	FLIPFLOP	B-1	KVRDIP 14	65C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	16	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.54E 03			
4324	FLIPFLOP	B-1	KVRDIP 14	65C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	16	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	2.01E 03			
4324	FLIPFLOP	B-1	KVRDIP 14	40C	DISPLAY	FIELD Q	025C	/ 0			
	N.R.	16	INORGANIC	75/76	GT	N.A.		6.88E 04			
4324	FLIPFLOP	B-1	KVRDIP 14	66C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	16	INORGANIC	75/75	GT	EQP OP	18CY 95X	3.78E 03			
4324	FLIPFLOP	B-2	KVRDIP 14	40C	SONAR	REL Q	025C	/ 0			
	N.R.	16	INORGANIC	74/75	NSS	EQP OP		2.60E 03			
5400	GATE	NONE	KVRDIP 14	129C	NA	LIFE V	125C	260/ 0			
	N.R.	4	INORGANIC	71/75	NA	RINGCNT		9.95E 06			
5400	GATE	NONE	PHDIP 14	135C	NA	LIFE V	125C	300/ 10	7/CATASTROPHIC:		
	N.R.	4	INORGANIC	71/75	NA	RINGCNT		1.08E 07	1/CATASTROPHIC:		
									1/CATASTROPHIC:		
									1/CATASTROPHIC:		
5404	INVERTER	NONE	KVRFPK 14	35C	NA	LIFE V	025C	28/ 1	1/DEGRADED		
	N.R.	6	INORGANIC	73/75	NA	RINGCNT		3.70E 05			
5404	INVERTER	NONE	KVRFPK 14	160C	NA	LIFE V	150C	28/ 0			
	N.R.	6	INORGANIC	74/75	NA	RINGCNT		2.63E 05			
5404	INVERTER	NONE	CFFK 14	35C	NA	LIFE V	025C	28/ 0			
	N.R.	6	INORGANIC	73/75	NA	RINGCNT		3.70E 05			
5404	INVERTER	NONE	CFFK 14	160C	NA	LIFE V	150C	28/ 0			
	N.R.	6	INORGANIC	74/75	NA	RINGCNT		2.63E 05			
5483	ADDER	B-1	EADIP 16	150C	NA	LIFE V	125C	98/ 0			
	BINARY	36	INORGANIC	75/75	NA	RINGCNT		5.22E 05			
5483	ADDER	NONE	KVRDIP 16	164C	NA	LIFE V	125C	98/ 0			
	BINARY	36	INORGANIC	73/75	NA	RINGCNT		2.51E 06			
5495	SHIFT REG	B-1	KVRFPK 14	63C	SONAR	FIELD G	025C	/ 0			
	N.R.	37	INORGANIC	74/76	NSS	N.A.		1.57E 06			
5495	SHIFT REG	B-1	KVRFPK 14	63C	SONAR	REL Q	025C	/ 0			
	N.R.	37	INORGANIC	74/74	NSS	EQP OP		2.27E 05			

DIGITAL DEVICE DATA

MOTOROLA TTL		MANUFACTURER : OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5495	SHIFT REG N.R.	B-1 37	KVRFPK 14 INORGANIC	74/74	SONAR NSS	CHECK Q VIB FTC	28HZ 1.3G 1 AXIS	/ 0 3.85E 04	
						EQP OP	025C	/ 0 1.15E 05	
576	GATE N.R.	N.R. 2	KVRDIP 14 INORGANIC	77C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G81X	/ 0 1.78E 03	
576	GATE N.R.	N.R. 2	KVRDIP 14 INORGANIC	77C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 7.25E 04	
576	GATE N.R.	N.R. 2	KVRDIP 14 INORGANIC	77C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 7.36E 04	
576	GATE N.R.	N.R. 2	KVRDIP 14 INORGANIC	77C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 1.57E 04	
576	GATE N.R.	N.R. 2	KVRDIP 14 INORGANIC	77C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 9CY 2.2G 81X	/ 0 2.16E 03	
6020	DIVIDER FREQUENCY	NONE 12	EAQIP 6 ORGANIC	95C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04	
6075	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC	35C 73/75	DIG PROC AI	CHECK Q EQP OP	025C	/ 1 2.80E 07	
6075	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC	64C 75/75	DIG PROC AI	REL Q TCVPC	-069C 054C 14CY .71G62X	/ 0 3.12E 05	
6075	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC		DIG PROC AU	FIELD Q N.A.		/ 0 2.41E 05	
6075	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC		DIG PROC AU	FIELD G N.A.		/ 0 1.24E 06	
6075	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC	81C 74	DIG PROC AU	REL Q TCVPC	-054C 071C 178CY1.2G65X	/ 0 2.40E 05	
6076	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC	35C 73/75	DIG PROC AI	CHECK Q EQP OP	025C	/ 0 1.28E 07	
6076	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC	64C 75/75	DIG PROC AI	REL Q TCVPC	-069C 054C 14CY .71G62X	/ 0 1.60E 05	
6076	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC		DIG PROC AU	FIELD Q N.A.		/ 0 1.89E 05	
6076	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC		DIG PROC AU	FIELD G N.A.		/ 0 9.77E 05	
6076	MULTIPLEXER N.R.	B-1	KVRFPK 0 INORGANIC	81C 74	DIG PROC AU	REL Q TCVPC	-054C 071C 178CY1.2G65X	/ 0 1.88E 05	
7400	GATE N.R.	NONE 4	EADIP 14 INORGANIC	29C 73/75	NA NA	LIFE V RINGCNT	025C	300/ 0 6.44E 06	
7400	GATE N.R.	NONE 4	EADIP 14 INORGANIC	129C 73/75	NA NA	LIFE V RINGCNT	125C	150/ 1 2.30E 06	1/SHORT
7400	GATE N.R.	NONE 4	PRDIP 14 INORGANIC	29C 71/75	NA NA	LIFE V RINGCNT	025C	300/ 0 1.23E 07	
74151	MULTIPLEXER N.R.	NONE 17	EADIP 16 INORGANIC	70C 72/75	NA NA	LIFE U REVBias	070C	25/ 2 2.50E 04	
7450	GATE EXPANDABLE	NONE 6	EADIP 14 INORGANIC	70C 72/75	NA NA	LIFE U REVBias	070C	25/ 0 2.50E 04	
7453	GATE EXPANDABLE	NONE 5	EADIP 14 INORGANIC	70C 72/75	NA NA	LIFE U REVBias	070C	25/ 0 2.50E 04	
7473	FLIPFLOP JK	NONE 20	PHDIP 14 INORGANIC	133C 72/75	NA NA	LIFE V RINGCNT	125C	224/ 14 5.84E 06	14/CATASTROPHIC

DIGITAL DEVICE DATA

MOTOROLA TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
7475	LATCH	NONE	EADIP 16	70C	NA	LIFE U	070C	25/ 0			
	N.R.	28	INORGANIC	72/75	NA	REVBias		2.50E 04			

NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5404	INVERTER	B-2	EADIP 14	34C	PROCESS	REL Q	025C	/ 0			
	FULL	6	NONE	74/74	GBC	EQP OP		6.95E 03			
5404	INVERTER	NONE	KVRDIP 14	135C	NA	LIFE V	125C	38/ 0			
	N.R.	6	INORGANIC	74/74	NA	OP DYN		1.90E 04			
						DYN EM		38/ 0			
								0.			
5404	INVERTER	NONE	KVRDIP 14	135C	NA	LIFE V	125C	23/ 0			
	N.R.	6	INORGANIC	75/75	NA	OP DYN		1.15E 04			
						DYN EM		23/ 0			
								0.			
5404	INVERTER	NONE	KVRDIP 14	135C	NA	LIFE V	125C	16/ 0			
	N.R.	6	INORGANIC	76/76	NA	OP DYN		8.00E 03			
						DYN EM		16/ 0			
								0.			
5410	GATE	B-1	SNFPK 14	235C	NA	LIFE Q	225C V 100%	35/ 1	1/SHORT		
	N.R.	3	INORGANIC	73/75	NA	ACC RB		1.40E 05	OXIDE		
									APPLICATION		
									PROCESS CONT		
						ACC RB	225C V 100%	34/ 16	4/CATASTROPHIC		
								6.40E 04	METAL		
									ELECTRO CHEM		
									10/CATASTROPHIC		
									METAL		
									ELECTRO CHEM		
5410	GATE	C-1	SNFPK 14	235C	NA	LIFE Q	225C	20/ 0			
	N.R.	3	INORGANIC	73/75	NA	STGLIFE		8.00E 04			
						STGLIFE	285C	20/ 0			
								4.00E 04			
5410	GATE	C-1	SNFPK 14	135C	NA	LIFE Q	125C 100%	70/ 1			
	N.R.	3	INORGANIC	73/75	NA	OP DYN		4.17E 05			
5410	GATE	C-1	SNFPK 14	210C	NA	LIFE Q	200C V 100%	35/ 2	1/SHORT		
	N.R.	3	INORGANIC	73/75	NA	ACC RB		2.00E 05	DIE		
									PROCESS CONT		
									1/DEGRADED		
									PKG SEAL		
									WORKMANSHIP		
5410	GATE	C-1	SNFPK 14	210C	NA	LIFE Q	200C V 100%	35/ 0			
	N.R.	3	INORGANIC	73/75	NA	ACC RB		1.40E 05			
						ACC RB	270C V 100%	35/ 0			
								7.00E 04			

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NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS			
		NO.	CHIP	TEST	APPL.	TEST		PART				
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS				
5410	GATE	C-1	SNFPK 14	235C	NA	LIFE Q	225C V 100%	35/ 2	1/SHORT			
	N.R.	3	INORGANIC	73/75	NA	ACC RB		2.00E 05	INTERCONNECT:			
									WORKMANSHIP			
									1/SHORT			
									INTERCONNECT:			
									WORKMANSHIP			
5410	GATE	C-1	SNFPK 14	235C	NA	LIFE Q	225C V 50%	35/ 0				
	N.R.	3	INORGANIC	73/75	NA	ACC RB		2.10E 05				
5410	GATE	C-1	SNFPK 14	260C	NA	LIFE Q	250C V 100%	35/ 8	1/ OPEN			
	N.R.	3	INORGANIC	73/75	NA	ACC RB		1.86E 05	1/DEGRADED			
									METAL			
									PROCESS CONT:			
									1/DEGRADED			
									METAL			
									PROCESS CONT:			
									1/CATASTROPHIC:			
									METAL			
									ELECTRO CHEM:			
									1/DEGRADED			
									METAL			
									PROCESS CONT:			
5411	GATE	B-1	SNDIP 14	57C	COMMUNIC	REL G	004C 051C	/ 0				
	N.R.	3	INORGANIC	75/75	GT	EQP OP	16CY 95%	2.32E 03				
5413	GATE	B-1	SNDIP 14	59C	DISPLAY	REL G	004C 051C	/ 0				
	SCHMITT TRIG	2	INORGANIC	75/75	GT	EQP OP	24CY 95%	1.13E 03				
54154	DECODE/DEMUX	B-1	SNDIP 24	61C	COMMUNIC	REL G	004C 051C	/ 0				
	N.R.	25	INORGANIC	75/75	GT	EQP OP	16CY 95%	3.09E 03				
54154	DECODE/DEMUX	B-1	SNDIP 24	61C	DISPLAY	REL G	004C 051C	/ 0				
	N.R.	25	INORGANIC	75/75	GT	EQP OP	18CY 95%	2.52E 03				
54154	DECODE/DEMUX	B-1	SNDIP 24	61C	DISPLAY	REL G	004C 051C	/ 0				
	N.R.	25	INORGANIC	75/75	GT	EQP OP	24CY 95%	2.26E 03				
54180	GENERATOR	B-1	SNDIP 14	69C	COMMUNIC	REL G	004C 051C	/ 0				
	N.R.	14	INORGANIC	75/75	GT	EQP OP	16CY 95%	1.93E 04				
54180	GENERATOR	B-1	SNDIP 14	69C	DISPLAY	REL G	004C 051C	/ 0				
	N.R.	14	INORGANIC	75/75	GT	EQP OP	18CY 95%	5.17E 04				
54180	GENERATOR	B-1	SNDIP 14	69C	DISPLAY	REL G	004C 051C	/ 0				
	N.R.	14	INORGANIC	75/75	GT	EQP OP	24CY 95%	1.30E 04				
5430	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD Q		/ 0				
	N.R.	1	INORGANIC	72/74	AI	N.A.		1.29E 03				
5451	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD Q		/ 0				
	N.R.	6	INORGANIC	72/74	AI	N.A.		1.29E 03				
5474	FLIPFLOP	B-2	SNDIP 14	33C	PROCESS	REL Q	025C	/ 0				
	D	12	NONE	74/74	GBC	EQP OP		6.95E 03				
54H10	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0				
	N.R.	3	N.R.	74/75	AIU	N.A.		8.43E 04				
7093	BUFFER	B-1	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0				
	N.R.	4	INORGANIC	75/75	AU	TCVPC	114CY2.2G70%	8.17E 03				
7093	BUFFER	B-1	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0				
	N.R.	4	INORGANIC	75/75	AU	TCVPC	141CY2.2G70%	1.03E 04				

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NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
7093	BUFFER	B-1	KVRFPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	5.65E 03			
7093	BUFFER	B-1	SNDIP 14	68C	COMMUNIC	REL G	004C 051C	/ 0			
	N.R.	4	INORGANIC	75/75	GT	EQP OP	16CY 95X	2.16E 04			
7093	BUFFER	B-1	SNDIP 14	68C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	4	INORGANIC	75/75	GT	EQP OP	18CY 95X	2.12E 05			
7093	BUFFER	B-1	SNDIP 14	68C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	4	INORGANIC	75/75	GT	EQP OP	24CY 95X	6.67E 04			
7095	BUFFER	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0			
	N.R.	7	INORGANIC	76/76	GF	N.A.		1.95E 05			
7097	BUFFER	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0			
	N.R.	8	INORGANIC	76/76	GF	N.A.		1.92E 04			
7123	MULTIPLEXER	B-1	SNDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	15	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.30E 04			
7123	MULTIPLEXER	B-1	SNDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	15	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.32E 04			
7160	COMPARATOR	B-1	KVRDIP 16	72C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	9	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.78E 03			
7160	COMPARATOR	B-1	KVRDIP 16	72C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	9	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.94E 03			
7200	COMPARATOR	B-1	SNDIP 14	48C	RADAR	FIELD G	030C	/ 0			
	N.R.	28	N.R.	76/76	GF	N.A.		1.76E 06			
7210	MULTIPLEXER	B-1	DIP 14	35C	CONTROL	REL Q	025C	/ 0			
	N.R.		N.R.	76/76	MGB	EQP OP		4.61E 03			
7210	MULTIPLEXER	B-1	DIP 14	35C	CONTROL	RELWR Q	025C	/ 0			
	N.R.		N.R.	76/77	MGB	EQP OP		3.96E 04			
7214	MULTIPLEXER	B-1	SNDIP 16	61C	COMMUNIC	REL G	004C 051C	/ 0			
	N.R.	16	N.R.	75/75	GT	EQP OP	16CY 95X	1.08E 04			
7214	MULTIPLEXER	B-1	SNDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	16	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	2.97E 04			
7214	MULTIPLEXER	B-1	SNDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	16	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	3.88E 04			
7214	MULTIPLEXER	B-1	SNDIP 16	61C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	16	N.R.	75/75	GT	EQP OP	18CY 95X	5.88E 03			
7214	MULTIPLEXER	B-1	SNDIP 16	61C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	16	N.R.	75/75	GT	EQP OP	24CY 95X	6.79E 03			
7400	GATE	C-1	KVRDIP 14	73C	SOMAR	CHECK Q	070C	/ 0			
	N.R.	4	N.R.	72/74	NSS	OP CNST		2.35E 06			
						EQP OP	025C	/ 0			
								2.35E 06			
						EM		/148			
								0.			
7400	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0			
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04			
						FNCT EM	025C	50/ 0			
								0.			

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NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7402	GATE N.R.	NONE 4	EADIP 14 N.R.	70C 72/75	NA NA	LIFE U REVBIA	070C	25/ 0 1.88E 04		
						RHRB	085C 85XRN	25/ 1 6.25E 03		
7402	GATE N.R.	NONE 4	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7403	GATE N.R.	C-1 4	KVRDIP 14 N.R.	73C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 5.13E 05		
						EQP OP	025C	/ 0 5.13E 05		
						EM		/ 30 0.		
74121	FLIPFLOP MONOSTABLE	C-1 8	KVRDIP 14 N.R.	80C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 5.99E 05		
						EQP OP	025C	/ 0 5.99E 05		
						EM		/ 39 0.		
74121	FLIPFLOP MONOSTABLE	NONE 8	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
				72/75				25/ 1 2.50E 04		
74151	MULTIPLEXER N.R.	NONE 17	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7440	BUFFER N.R.	C-1 2	KVRDIP 14 N.R.	74C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 1.28E 06		
						EQP OP	025C	/ 0 1.28E 06		
						EM		/ 63 0.		
7442	DECODER BCD/DECIMAL	C-1 18	KVRDIP 16 N.R.	84C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 2.13E 04		
						EQP OP	025C	/ 0 2.13E 04		
						EM		/ 1 0.		
7453	GATE EXPANDABLE	NONE 5	EADIP 14 N.R.	70C 72/75	NA NA	LIFE U REVBIA	070C	25/ 0 2.50E 04		
7453	GATE EXPANDABLE	NONE 5	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		

DIGITAL DEVICE DATA

NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7474	FLIPFLOP D	C-1 12	KVRDIP 14 N.R.	77C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 9.84E 05	
						EQP OP	025C	/ 0 9.84E 05	
						EM		/109 0.	
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRH	25/ 0 2.50E 04	
7474	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUM LIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 0 0.	
7474	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUM LIFE	085C 85XRH	50/ 1 4.95E 04	
						FNCT EM	025C	49/ 1 0.	
7474	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUM LIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 0 0.	
7474	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U HUM LIFE	085C 85XRH	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 0 0.	
7475	LATCH N.R.	NONE 24	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRH	25/ 0 2.50E 04	
7476	FLIPFLOP JK	C-1 16	KVRDIP 14 N.R.	74C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 1.22E 06	
						EQP OP	025C	/ 0 1.22E 06	
						EM		/117 0.	
7486	GATE N.R.	C-1 4	KVRDIP 14 N.R.	83C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 3.85E 05	
						EQP OP	025C	/ 0 3.85E 05	
						EM		/ 9 0.	

DIGITAL DEVICE DATA

NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7490	COUNTER DECADE	C-1 15	KVRDIP 14 N.R.	83C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 1.01E 06		
						EQP OP	025C	/ 0 1.01E 06		
						EM		/ 88 0.		
7490	COUNTER DECADE	NONE 15	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7493	COUNTER BINARY	C-1 25	KVRDIP 14 N.R.	71C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 8.98E 05		
						EQP OP	025C	/ 0 8.98E 05		
						EM		/ 69 0.		
7495	SHIFT REG N.R.	C-1 37	KVRDIP 14 N.R.	92C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 2.16E 06		
						EQP OP	025C	/ 0 2.16E 06		
						EM		/178 0.		
7495	SHIFT REG N.R.	NONE 37	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7551	FLIPPLOP D	B-1 45	SNDIP 16 INORGANIC	29C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 2.70E 04		
7551	FLIPPLOP D	B-1 45	SNDIP 16 INORGANIC	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 1.02E 05		
7551	FLIPPLOP D	B-1 45	SNDIP 16 INORGANIC	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 3.17E 04		
8094	BUFFER N.R.	C-1 4	KVRDIP 14 N.R.	80C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 7.27E 05		
						EQP OP	025C	/ 0 7.27E 05		
						EM		/ 30 0.		
8095	BUFFER N.R.	NONE 7	EADIP 16 INORGANIC	89C 75/77	DISPLAY GBC	FIELD U N.A.	040C 55XPWR	/ 2 8.09E 05		
8095	BUFFER N.R.	NONE 7	EADIP 16 INORGANIC	74C 77/77	INTRFACE GBC	CHECK G EQP OP	025C	/ 0 1.16E 03		

DIGITAL DEVICE DATA

NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8200	COMPARATOR	C-1	KVRDIP 14	85C	SONAR	CHECK Q	070C	/ 0	
	N.R.	28	N.R.	72/74	NSS	OP CNST		2.78E 05	
						EQP OP	025C	/ 0	
								2.78E 05	
						EM		/ 9	
								0.	
8200	COMPARATOR	NONE	EADIP 16	66C	DISPLAY	FIELD U	040C 55XPWR	/ 1	
	N.R.	28	INORGANIC	75/77	GBC	N.A.		1.04E 07	
8214	MULTIPLEXER	NONE	EADIP 16	66C	DISPLAY	FIELD U	040C 55XPWR	/ 0	
	N.R.	16	N.R.	75/77	GBC	N.A.		4.26E 05	
8220	GENERATOR	C-1	KVRDIP 14	81C	SONAR	CHECK Q	070C	/ 0	
	N.R.	10	N.R.	72/74	NSS	OP CNST		2.14E 05	
						EQP OP	025C	/ 0	
								2.14E 05	
						EM		/ 21	
								0.	
9601	FLIPFLOP	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0	
	MONOSTABLE	8	INORGANIC	76/76	GF	N.A.		2.24E 03	
9601	FLIPFLOP	B-2	EADIP 14	39C	PROCESS	REL Q	025C	/ 0	
	MONOSTABLE	8	NONE	74/74	GBC	EQP OP		1.56E 04	

RAYTHEON TTL		:MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCR.N. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:
: 151	: COUNTER	: B-1	: SNDIP 14	: 65C	: COMMUNIC	: CHECK Q	: -054C 055C	: / 0	:
:	: BCD	:	: INORGANIC	: 75/76	: AI	: TCVPC	: 14CY 2.2G70X	: 5.40E 04	:
: 151	: COUNTER	: B-1	: SNDIP 14	: 65C	: COMMUNIC	: CHECK Q	: -054C 055C	: / 0	:
:	: BCD	:	: INORGANIC	: 75/76	: AI	: TCVPC	: 15CY 2.2G70X	: 5.62E 04	:
: 151	: COUNTER	: B-1	: SNDIP 14	: 65C	: COMMUNIC	: REL Q	: -054C 055C	: / 0	:
:	: BCD	:	: INORGANIC	: 75/75	: AI	: TCVPC	: 140CY2.2G70X	: 2.34E 04	:
: 151	: COUNTER	: B-1	: SNDIP 14	: 65C	: COMMUNIC	: RELPR Q	: -054C 055C	: / 0	:
:	: BCD	:	: INORGANIC	: 74/75	: AI	: TCVPC	: 16CY2.2G 70X	: 2.65E 04	:
: 151	: COUNTER	: B-1	: SNDIP 14	: 65C	: COMMUNIC	: RELPR Q	: -054C 055C	: / 0	:
:	: BCD	:	: INORGANIC	: 74/76	: AI	: TCVPC	: 16CY 2.2G70X	: 5.40E 04	:
: 3101	: FLIPFLOP	: A-1	: P 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: JK	:	: INORGANIC	: 72/74	: SF	: N.A.	:	: 5.13E 05	:
: 3120	: FLIPFLOP	: B-2	: AUFPK 14	: 62C	: SONAR	: REL Q	: 025C	: / 0	:
:	: JK	: 16	: INORGANIC	: 74/75	: NSS	: EQP OP	:	: 2.06E 04	:
: 3200	: GATE	: A-1	: P 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: EXPANDABLE	: 1	: INORGANIC	: 72/74	: SF	: N.A.	:	: 7.78E 04	:
: 3200	: FLIPFLOP	: A-1	: P 14	: 35C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: JK	: 6	: INORGANIC	: 72/74	: SF	: N.A.	:	: 3.42E 05	:
: 3200	: FLIPFLOP	: A-1	: AUDIP 14	: 32C	: COMB/NOC	: FIELD U	: 025C	: / 0	:
:	: JK	: 6	: INORGANIC	: 72/74	: SF	: N.A.	:	: 3.11E 04	:

DIGITAL DEVICE DATA

SIGNETICS		MANUFACTURER				RELIABILITY ANALYSIS CENTER			
TTL		OPERATIONAL TYPE							
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1416	GATE EXPANDABLE	A-1 2	SNFFK 14 N.R.	27C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.18E 07	
1417	GATE EXPANDABLE	A-1 2	SNFFK 14 N.R.	27C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 8.35E 06	
1424	FLIPFLOP RS	A-1 16	SNFFK 14 N.R.	28C 72/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 3.77E 06	
1470	GATE N.R.	A-1 3	SNFFK 14 N.R.	26C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 6.42E 05	
1471	GATE N.R.	A-1 3	SNFFK 14 N.R.	26C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.42E 05	
1480	GATE N.R.	A-1 4	SNFFK 14 N.R.	26C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.83E 07	
1481	GATE N.R.	A-1 4	SNFFK 14 N.R.	26C 70/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 1.21E 06	
1490	INVERTER N.R.	NONE 6	KVRFPK 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
15400	GATE N.R.	A-1 4	SNFFK 14 N.R.	37C 73/74	COMB/NOC SF	FIELD U N.A.	025C	/ 0 2.04E 04	
15402	GATE N.R.	NONE 4	KVRDIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
15404	INVERTER N.R.	B-1 6	KVRFPK 14 N.R.	150C /74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
15404	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	59C 75/76	COMMUNIC AI	CHECK Q TCVP	-054C 055C 11CY 2.2G70X	/ 0 9.68E 03	
15404	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	59C 75/76	COMMUNIC AI	CHECK Q TCVP	-054C 055C 15CY 2.2G70X	/ 0 1.41E 04	
15404	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	59C 75/75	COMMUNIC AI	REL Q TCVP	-054C 055C 140CY 2.2G70X	/ 0 5.86E 03	
15404	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	59C 75/76	COMMUNIC AI	RELPR Q TCVP	-054C 055C 11CY 2.2G70X	/ 0 7.88E 03	
15404	INVERTER N.R.	B-1 6	KVRDIP 14 N.R.	59C 74/76	COMMUNIC AI	RELPR Q TCVP	-054C 055C 16CY 2.2G70X	/ 0 1.14E 04	
15404	INVERTER N.R.	N.R. 6	KVRDIP 14 N.R.	59C 74/75	RADAR AU	RELPR Q TCVP	-054C 055C 6CY 2.2G 88X	/ 0 2.80E 03	
154109	FLIPFLOP JK	N.R. 16	KVRDIP 16 INORGANIC	81C 76/77	RADAR AU	REL Q TCVP	-054C 071C 6CY 2.2G 81X	/ 0 1.00E 04	
154109	FLIPFLOP JK	N.R. 16	KVRDIP 16 INORGANIC	81C 76/77	RADAR AU	REL Q TCVP	-054C 071C 7CY 2.2G 81X	/ 0 3.25E 03	
15410	GATE N.R.	B-1 3	KVRDIP 14 N.R.	52C 75/75	DIG PROC AI	REL Q TCVP	-054C 050C 13CY 1.3G 62X	/ 0 3.08E 04	
15410	GATE N.R.	B-1 3	KVRDIP 14 N.R.	52C 75/75	DIG PROC AI	REL Q TCVP	-054C 050C 17CY 1.3G 62X	/ 0 4.03E 04	
154121	FLIPFLOP MONOSTABLE	N.R. 8	KVRFPK 14 N.R.	39C 76/78	DIG PROC GBC	FIELD U N.A.	025C	/ 0 1.94E 05	

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54123	FLIPFLOP MONOSTABLE	B-1 20	KVRDIP 16 N.R.	71C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 2.17E 04		
54123	FLIPFLOP MONOSTABLE	B-1 20	KVRDIP 16 N.R.	71C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.84E 04		
54123	FLIPFLOP MONOSTABLE	NONE 20	KVRDIP 16 N.R.	146C 74/74	NA NA	LIFE V OP DYM	125C	45/ 4.50E 04	0	
						EM		45/ 0.	0	
54134	DECODE/DEMUX N.R.	NONE 25	KVRDIP 24 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 4.50E 04	0	
						EM		45/ 0.	0	
54156	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 N.R.	150C 774	NA NA	LIFE V STGLIFE	150C	45/ 4.50E 04	0	
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	77C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 2.77E 04		
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	77C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 3.62E 04		
54161	COUNTER BINARY	NONE 57	KVRFPK 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 4.50E 04	0	
						EM		45/ 0.	0	
54163	COUNTER BINARY	B-1 51	KVRDIP 16 N.R.	77C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.68E 03		
54163	COUNTER BINARY	B-1 51	KVRDIP 16 N.R.	77C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.16E 03		
54163	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	150C 74/75	NA NA	LIFE Q STGLIFE	150C	82/ 8.20E 04	0	
54163	COUNTER BINARY	B-1 58	KVRFPK 16 INORGANIC	183C 74/75	NA NA	LIFE Q PAR EXC	125C	180/ 1.79E 05	1	
						STAT EM	025C	179/ 0.	4	
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 N.R.	61C 75/75	DIG PROC AI	REL Q TCVPC	-050C 050C 13CY1.3G 62X	/ 0 1.20E 04		
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 N.R.	61C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.57E 04		
54165	SHIFT REG N.R.	B-1 62	KVRDIP 16 N.R.	69C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 3.28E 04		

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54165	SHIFT REG N.R.	B-1 62	KVRDIP 16 N.R.	69C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 4.28E 04		
54180	GENERATOR N.R.	X 14	KVRDIP 14 INORGANIC	144C 77/77	NA NA	LIFE V OP DYN	125C	134/ 0 1.34E 05		
						EM		134/ 1 0.	1/DEGRADED	
54193	COUNTER BINARY	B-1 48	KVRDIP 16 N.R.	79C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 4.07E 04		
54193	COUNTER BINARY	B-1 48	KVRDIP 16 N.R.	79C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 5.33E 04		
54193	COUNTER BINARY	NONE 48	KVRDIP 16 N.R.	154C 74/74	NA NA	LIFE V OP DYN	125C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
54194	SHIFT REG N.R.	B-1 47	KVRDIP 16 N.R.	68C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 7.84E 03		
54194	SHIFT REG N.R.	B-1 47	KVRDIP 16 N.R.	68C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.02E 04		
5420	GATE N.R.	N.R. 2	KVRDIP 14 N.R.	56C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 2.80E 05		
5430	GATE N.R.	B-1 1	KVRDIP 14 N.R.	51C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.54E 04		
5430	GATE N.R.	B-1 1	KVRDIP 14 N.R.	51C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.01E 04		
5442	DECODER BCD/DECIMAL	B-1 18	KVRDIP 16 N.R.	63C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 9.52E 03		
5442	DECODER BCD/DECIMAL	B-1 18	KVRDIP 16 N.R.	63C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.24E 04		
5475	LATCH BISTABLE	B-1 24	KVRDIP 16 N.R.	64C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.19E 04		
5475	LATCH BISTABLE	B-1 24	KVRDIP 16 N.R.	64C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.56E 04		
5486	GATE N.R.	NONE 4	KVRFPK 10 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	60C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.65E 04		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	60C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.16E 04		

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5495	SHIFT REG N.R.	B-1 37	KVRDIP 14 N.R.	65C 75/75	DIG PROC AI	REL Q TCVPC	-045C 050C 17CY1.3G 62X	/ 0 1.02E 04	
5495	SHIFT REG N.R.	B-1 37	KVRDIP 14 N.R.	65C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.96E 04	
5496	SHIFT REG N.R.	B-1 39	KVRDIP 16 N.R.	75C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.96E 04	
5496	SHIFT REG N.R.	B-1 39	KVRDIP 16 N.R.	75C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 3.44E 04	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	49/ 0 9.80E 04	
						EM		49/ 1 0.	1/CATASTROPHIC CONTAMINATION:
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	49/ 0 9.80E 04	
						EM		49/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	50/ 0 1.00E 05	
						EM		50/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	50/ 0 1.00E 05	
						EM		50/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	49/ 0 9.80E 04	
						EM		49/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	50/ 0 1.00E 05	
						EM		50/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	48/ 0 9.60E 04	
						EM		48/ 0 0.	

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	44/ 0 8.80E 04	
						EM		44/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	48/ 0 9.60E 04	
						EM		48/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	46/ 0 9.20E 04	
						EM		46/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	94/ 0 9.40E 04	
						EM		94/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	117/ 0 1.17E 05	
						EM		117/ 1 0.	1/CATASTROPHIC: ELECTRO MIGR:
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	95/ 0 9.50E 04	
						EM		95/ 0 0.	

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	50/ 0 1.00E 05		
						EM		50/ 0 0.		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	47/ 0 9.40E 04		
						EM		47/ 0 0.		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	49/ 0 9.80E 04		
						EM		49/ 0 0.		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	49/ 0 9.80E 04		
						EM		49/ 0 0.		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	50/ 0 1.00E 05		
						EM		50/ 0 0.		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	48/ 0 9.60E 04		
						EM		48/ 0 0.		
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	131C 74/74	NA NA	LIFE V OP DYN	125C	50/ 0 1.00E 05		
						EM		50/ 1 0.	1/CATASTROPHIC WIRE BOND	
7400	GATE N.R.	NONE 4	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRH	25/ 0 2.50E 04		
7402	GATE N.R.	NONE 4	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
7402	GATE N.R.	NONE 4	EADIP 14 N.R.	85C 77/77	NA NA	LIFE U HUM LIFE	085C 85XRH	50/ 0 5.00E 04		
						FNCT EM	025C	50/ 0 0.		

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7402	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0	
	N.R.	4	N.R.	72/75	NA	RHRB		2.50E 04	
7404	INVERTER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0	
	N.R.	6	N.R.	72/75	NA	RHRB		2.50E 04	
7406	INTERFACE BUFFER/DRIVER	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0	
		6	INORGANIC	72/75	NA	RHRB		6.25E 03	
7408	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0	
	N.R.	4	N.R.	72/75	NA	STGLIFE		1.90E 04	
						RHRB	085C 85XRH	25/ 0	
								1.25E 04	
7410	GATE	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0	
	N.R.	3	INORGANIC	72/75	NA	STGLIFE		1.52E 04	
7410	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0	
	N.R.	3	INORGANIC	72/75	NA	RHRB		2.50E 04	
74121	FLIPFLOP MONOSTABLE	NONE	KVRDIP 14	130C	NA	LIFE V	125C	45/ 0	
		8	N.R.	74/74	NA	OP DYN		4.50E 04	
						EM		45/ 0	
								0.	
74121	FLIPFLOP MONOSTABLE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0	
		8	N.R.	72/75	NA	RHRB		2.50E 04	
74123	FLIPFLOP MONOSTABLE	NONE	EADIP 16	150C	NA	LIFE U	150C	38/ 0	
		20	INORGANIC	72/75	NA	STGLIFE		3.80E 04	
74123	FLIPFLOP MONOSTABLE	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0	
		20	INORGANIC	72/75	NA	RHRB		2.50E 04	
74150	MULTIPLEXER	NONE	EADIP 24	150C	NA	LIFE V	150C	45/ 0	
	N.R.	26	N.R.	74/74	NA	STGLIFE		4.50E 04	
						EM		45/ 0	
								0.	
74151	MULTIPLEXER	NONE	EADIP 16	150C	NA	LIFE U	150C	38/ 0	
	N.R.	17	N.R.	72/75	NA	STGLIFE		3.80E 04	
74153	MULTIPLEXER	NONE	EADIP 16	150C	NA	LIFE U	150C	38/ 0	
	N.R.	16	N.R.	72/75	NA	STGLIFE		3.80E 04	
74154	DECODE/DEMUX	NONE	EADIP 24	150C	NA	LIFE U	150C	38/ 0	
	N.R.	25	N.R.	72/75	NA	STGLIFE		3.80E 04	
74154	DECODE/DEMUX	NONE	EADIP 24	85C	NA	LIFE U	085C 85XRH	25/ 0	
	N.R.	25	N.R.	72/75	NA	RHRB		2.50E 04	

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
74160	COUNTER DECADE	NONE 60	EADIP 16 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
74175	FLIPFLOP D	NONE 24	EADIP 16 N.R.	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 3.80E 04		
74175	FLIPFLOP D	NONE 24	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
74193	COUNTER BINARY	NONE 48	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7420	GATE N.R.	NONE 2	EADIP 14 N.R.	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 1 3.80E 04		
7420	GATE N.R.	NONE 2	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7430	GATE N.R.	NONE 1	EADIP 14 INORGANIC	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 1.71E 04		
7430	GATE N.R.	NONE 1	EADIP 14 INORGANIC	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7442	DECODER BCD/DECIMAL	NONE 18	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7450	GATE EXPANDABLE	B-2 6	EADIP 14 N.R.	150C /75	NA NA	LIFE V STGLIFE	150C	52/ 0 2.50E 04		
7450	GATE EXPANDABLE	B-2 6	EADIP 14 N.R.	134C /75	NA NA	LIFE V RINGCNT	125C	52/ 0 5.20E 04		
7451	GATE N.R.	NONE 6	EADIP 14 INORGANIC	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 3.80E 04		
7451	GATE N.R.	NONE 6	EADIP 14 INORGANIC	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04		
7453	GATE N.R.	NONE 5	EADIP 14 N.R.	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 1.90E 04		
						RHRB	085C 85XRN	25/ 0 1.25E 04		
7473	FLIPFLOP JK	NONE 16	EADIP 14 N.R.	150C 74/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04		
						EM		45/ 0 0.		

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	85C 77/77	NA NA	LIFE U NUMLIFE	085C 85ERN	30/ 0 5.00E 04	
						FNCT EM	025C	30/ 0 0.	
7474	FLIPFLOP D	NONE 12	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85ERN	25/ 0 2.50E 04	
7475	LATCH BISTABLE	NONE 24	EADIP 16 N.R.	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 3.16E 04	
						RHRB	085C 85ERN	25/ 0 4.20E 03	
7483	ADDER FULL	NONE 36	EADIP 16 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85ERN	25/ 0 2.50E 04	
7490	COUNTER DECADE	NONE 15	EADIP 14 N.R.	151C 74	NA NA	LIFE V OP DYN	125C	45/ 0 4.50E 04	
7490	COUNTER DECADE	NONE 15	EADIP 14 N.R.	151C 74/74	NA NA	LIFE V OP DYN	125C	43/ 0 4.30E 04	
						EM		43/ 0 0.	
7490	COUNTER DECADE	NONE 15	EADIP 14 N.R.	85C 72/75	NA NA	LIFE U RHRB	085C 85ERN	25/ 0 2.50E 04	
7495	SHIFT REG N.R.	NONE 37	EADIP 14 INORGANIC	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 3.80E 04	
7495	SHIFT REG N.R.	NONE 37	EADIP 14 INORGANIC	85C 72/75	NA NA	LIFE U RHRB	085C 85ERN	25/ 0 2.50E 04	
8200	SHIFT REG N.R.	B-1 62	KVRFPK 24 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 9.55E 04	
8200	SHIFT REG N.R.	NONE 62	KVRFPK 24 N.R.	150C 73/74	NA NA	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
8202	SHIFT REG N.R.	B-1 62	KVRFPK 24 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 2.92E 05	
8233	MULTIPLEXER N.R.	B-1 14	KVRFPK 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.54E 05	
8233	MULTIPLEXER N.R.	C-1 14	KVRFPK 16 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 2.21E 05	
8233	MULTIPLEXER N.R.	C-1 14	KVRFPK 16 N.R.	105C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.30 50X	/ 0 1.02E 04	

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
8233	MULTIPLEXER	NONE	AUDIP 16	150C	NA	LIFE V	150C	45/ 0		
	N.R.	14	N.R.	74	NA	STGLIVE		4.30E 04		
8233	MULTIPLEXER	NONE	EADIP 16	72C	DISPLAY	FIELD U	040C 55XPWR	/ 0		
	N.R.	14	N.R.	75/77	GBC	N.A.		4.81E 04		
8234	MULTIPLEXER	NONE	EADIP 16	66C	DISPLAY	FIELD U	040C 55XPWR	/ 0		
	N.R.	14	N.R.	75/77	GBC	N.A.		4.68E 04		
8235	MULTIPLEXER	NONE	EADIP 16	77C	DISPLAY	FIELD U	040C 55XPWR	/ 0		
	N.R.	14	N.R.	75/77	GBC	N.A.		9.62E 04		
8242	GATE	NONE	KVRDIP 14	142C	NA	LIFE V	125C	45/ 0		
	N.R.	20	N.R.	74/74	NA	OP DYN		4.50E 04		
						EM		45/ 0		
								0.		
8242	GATE	NONE	EADIP 14	152C	NA	LIFE V	125C	45/ 0		
	N.R.	20	N.R.	74	NA	OP DYN		4.50E 04		
8243	SCALER	B-1	KVRDIP 24	66C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	70	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	2.52E 03		
8243	SCALER	B-1	KVRDIP 24	66C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	70	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	3.29E 03		
8250	DECODER	B-1	KVRFPK 16	49C	SONAR	FIELD G	025C	/ 0		
	BINARY/OCTAL	15	N.R.	74/76	NSS	N.A.		5.41E 04		
8250	DECODER	B-1	KVRFPK 16	49C	SONAR	REL Q	025C	/ 0		
	BINARY/OCTAL	15	N.R.	74/74	NSS	EQP OP		7.83E 03		
8250	DECODER	B-1	KVRFPK 16		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	BINARY/OCTAL	15	N.R.	74/74	NSS	VIB FTG	1 AXIS	1.33E 03		
						EQP OP	025C	/ 0		
								3.98E 03		
8261	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	9	N.R.	74/75	AIU	N.A.		5.62E 03		
8263	MULTIPLEXER	B-1	KVRFPK 24		RADAR	FIELD G		/ 0		
	N.R.	34	N.R.	74/75	AIU	N.A.		7.12E 04		
8263	MULTIPLEXER	C-1	KVRFPK 24		RADAR	FIELD Q		/ 0		
	N.R.	34	N.R.	72/74	AIU	N.A.		8.00E 04		
8263	MULTIPLEXER	C-1	KVRFPK 24	128C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	34	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	3.69E 03		
8263	MULTIPLEXER	NONE	EADIP 24	85C	DISPLAY	FIELD U	040C 55XPWR	/ 0		
	N.R.	34	N.R.	75/77	GBC	N.A.		2.10E 05		
8266	MULTIPLEXER	B-1	SNDIP 16	65C	DISPLAY	REL Q	-054C 055C	/ 0		
	N.R.	18	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	2.94E 04		

DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP	TEST	APPL.	TEST		PART			
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS			
:8266	: MULTIPLEXER	: B-1	: SNDIP 16	: 81C	: DISPLAY	: RELPR Q	: -054C 071C	: / 0			
:	: N.R.	: 18	: INORGANIC	: 75/76	: AI	: TCVPC	: 178CY1.4G60X	: 2.56E 04			
:8281	: COUNTER	: NONE	: EADIP 14	: 69C	: DISPLAY	: FIELD U	: 040C 55XPWR	: / 0			
:	: BINARY	: 43	: N.R.	: 75/77	: GBC	: N.A.		: 1.98E 06			
:8290	: COUNTER	: B-1	: KVRDIP 14	: 61C	: DIG PROC	: REL Q	: -054C 050C	: / 0			
:	: DECADE	: 44	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62X	: 1.26E 03			
:8290	: COUNTER	: B-1	: KVRDIP 14	: 61C	: DIG PROC	: REL Q	: -054C 050C	: / 0			
:	: DECADE	: 44	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62X	: 1.65E 03			
:8291	: COUNTER	: B-1	: KVRDIP 14	: 61C	: DIG PROC	: REL Q	: -054C 050C	: / 0			
:	: BINARY	: 43	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62X	: 1.10E 03			
:8292	: COUNTER	: B-1	: KVRDIP 14	: 77C	: DIG PROC	: REL Q	: -054C 071C	: / 0			
:	: DECADE	: 44	: INORGANIC	: 74/74	: AU	: TCVPC	: 707CY 1G 56X	: 9.54E 03			
:8292	: COUNTER	: NONE	: KVRDIP 14	: 46C	: DISPLAY	: FIELD U	: 040C 55XPWR	: / 0			
:	: DECADE	: 44	: INORGANIC	: 75/77	: GBC	: N.A.		: 2.43E 06			
:8293	: COUNTER	: N.R.	: KVRDIP 14	: 76C	: RADAR	: REL Q	: -054C 071C	: / 0			
:	: BINARY	: 43	: NONE	: 73/76	: AU	: TCVPC	: 10CY 2.2G81X	: 3.60E 03			
:8293	: COUNTER	: N.R.	: KVRDIP 14	: 76C	: RADAR	: REL Q	: -054C 071C	: / 0			
:	: BINARY	: 43	: NONE	: 73/77	: AU	: TCVPC	: 6CY 2.2G 81X	: 1.30E 05			
:8293	: COUNTER	: N.R.	: KVRDIP 14	: 76C	: RADAR	: REL Q	: -054C 071C	: / 0			
:	: BINARY	: 43	: NONE	: 73/77	: AU	: TCVPC	: 7CY 2.2G 81X	: 1.33E 05			
:8293	: COUNTER	: N.R.	: KVRDIP 14	: 76C	: RADAR	: REL Q	: -054C 071C	: / 0			
:	: BINARY	: 43	: NONE	: 73/77	: AU	: TCVPC	: 8CY 2.2G 81X	: 2.82E 04			
:8293	: COUNTER	: N.R.	: KVRDIP 14	: 76C	: RADAR	: REL Q	: -054C 071C	: / 0			
:	: BINARY	: 43	: NONE	: 73/76	: AU	: TCVPC	: 9CY 2.2G 81X	: 3.89E 03			
:8680	: INVERTER	: N.R.	: KVRDIP 14	:	: RADAR	: FIELD Q	:	: / 0			
:	: N.R.	: 6	: N.R.	: 75/78	: AU	: N.A.	:	: 2.70E 05			
:8680	: INVERTER	: N.R.	: KVRDIP 14	: 65C	: RADAR	: RELPR Q	: -054C 055C	: / 0			
:	: N.R.	: 6	: N.R.	: 74/75	: AU	: TCVPC	: 6CY 2.2G 88X	: 2.46E 05			
:	:	:	:	:	:	:	:	:			
:	:	:	:	: 74/75	:	:	:	: / 1			
:	:	:	:	:	:	:	:	: 8.40E 04			
:8881	: GATE	: NONE	: SDIP 14	: 27C	: DIG PROC	: FIELD G	: 025C	: / 0			
:	: N.R.	: 4	: N.R.	: 73/75	: GBC	: N.A.	:	: 1.22E 05			

SILICONIX TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP	TEST	APPL.	TEST		PART			
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS			
:100	: GATE	: C-1	: FPK 1	:	: RADAR	: FIELD Q	:	: / 0			
:	: N.R.	: 2	: N.R.	: 72/74	: AIU	: N.A.	:	: 7.77E 03			
:106	: GATE	: C-1	: FPK 1	:	: RADAR	: FIELD Q	:	: / 0			
:	: N.R.	: 4	: N.R.	: 72/74	: AIU	: N.A.	:	: 1.94E 03			

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
2495	GATE	B-1	AUFFK 0	64C	DIG PROC	REL Q	-069C 054C	/ 0	
	N.R.		INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.54E 03	
5330	GATE	A-1	SNFFK 10	28C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	2	INORGANIC	70/74	SF	N.A.		3.57E 04	
5330	INVERTER	A-1	SNFFK 10	31C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	INORGANIC	70/74	SF	N.A.		3.57E 04	
5400	GATE	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	INORGANIC	72/74	SF	N.A.		9.33E 04	
5400	GATE	A-1	KVRDIP 14	29C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	INORGANIC	72/74	SF	N.A.		4.67E 04	
5400	GATE	JB	KVRFFK 14	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	2.04E 03	
5400	GATE	JB	KVRFFK 14	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	2.58E 03	
5400	GATE	JB	KVRFFK 14	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	1.41E 03	
5400	GATE	JB	KVRFFK 14	76C	RADAR	CHECK Q	-054C 071C	/ 0	
	N.R.	4	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	5.18E 03	
5400	GATE	JB	KVRFFK 14	76C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	6.82E 04	
5400	GATE	JB	KVRFFK 14	76C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	8.02E 04	
5400	GATE	B-1	KVRFFK 14	30C	DIG PROC	CHECK Q	025C	/ 0	
	N.R.	4	INORGANIC	73/75	AI	EQP OP		3.45E 07	
5400	GATE	B-1	KVRFFK 14	59C	DIG PROC	REL Q	-069C 054C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	3.22E 05	
5400	GATE	B-1	KVRFFK 14	76C	DIG PROC	REL Q	-054C 071C	/ 0	
	N.R.	4	INORGANIC	74	AU	TCVPC	178CY1.2G65X	4.28E 05	
5400	GATE	B-1	KVRFFK 14	30C	NAVIGATE	FIELD G	025C	/ 0	
	N.R.	4	INORGANIC	74/75	AI	N.A.		1.71E 03	
5400	GATE	B-1	KVRDIP 14	59C	DISPLAY	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	8.83E 04	
5400	GATE	B-1	KVRDIP 14	75C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	N.R.	4	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	7.69E 04	
5400	GATE	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	4	INORGANIC	76/76	GF	N.A.		4.98E 04	
5400	GATE	B-2	KVRFFK 14	76C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	4	INORGANIC	74/74	ML	TCVPC	14CY 2.2G62X	2.16E 03	
5400	GATE	B-2	KVRDIP 14	29C	SONAR	REL Q	025C	/ 0	
	N.R.	4	INORGANIC	74/75	NSS	EQP OP		7.43E 06	
5401	GATE	A-1	SNFFK 14	30C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	4	INORGANIC	72/74	SF	N.A.		3.11E 04	
5401	GATE	JB	KVRFFK 14	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	3.06E 03	
5401	GATE	JB	KVRFFK 14	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	3.87E 03	
5401	GATE	JB	KVRFFK 14	60C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	1.41E 03	

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5401	GATE	JB	KVRFPK 14	76C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59%	4.21E 03			
5401	GATE	JB	KVRFPK 14	76C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59%	4.95E 03			
5401	GATE	B-1	KVRFPK 14	30C	DIG PROC	CHECK Q	025C	/ 0			
	N.R.	4	INORGANIC	73/75	AI	EQP OP		3.61E 07			
5401	GATE	B-1	KVRFPK 14	59C	DIG PROC	REL Q	-069C 054C	/ 0			
	N.R.	4	INORGANIC	75/75	AI	TCVPC	14CY .71G62%	3.16E 05			
5401	GATE	B-1	KVRFPK 14	76C	DIG PROC	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	/74	AU	TCVPC	178CY1.2G65%	1.97E 05			
5402	GATE	JB	KVRFPK 14	62C	NAVIGATE	REL Q	-054C 055C	/ 0			
	N.R.	4	INORGANIC	75/75	AI	TCVPC	114CY2.2G70%	1.02E 03			
5402	GATE	JB	KVRFPK 14	62C	NAVIGATE	REL Q	-054C 055C	/ 0			
	N.R.	4	INORGANIC	75/75	AI	TCVPC	141CY2.2G70%	1.29E 03			
5402	GATE	B-1	KVRFPK 14	42C	DIG PROC	CHECK Q	035C	/ 0			
	N.R.	4	INORGANIC	73/75	AI	EQP OP		1.39E 07			
5402	GATE	B-1	KVRFPK 14	61C	DIG PROC	REL Q	-069C 054C	/ 0			
	N.R.	4	INORGANIC	75/75	AI	TCVPC	14CY .71G62%	1.26E 05			
5402	GATE	B-1	KVRDIP 14	60C	DISPLAY	REL Q	-054C 055C	/ 0			
	N.R.	4	INORGANIC	74/75	AI	TCVPC	409CY1.4G60%	1.47E 04			
5402	GATE	B-1	KVRDIP 14	76C	DISPLAY	RELPR Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	75/76	AI	TCVPC	178CY1.4G60%	1.28E 04			
5402	GATE	N.R.	KVRDIP 14	76C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	76/77	AU	TCVPC	6CY 2.2G 81%	1.00E 04			
5402	GATE	N.R.	KVRDIP 14	76C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	4	INORGANIC	76/77	AU	TCVPC	7CY 2.2G 81%	3.25E 03			
5404	INVERTER	JB	KVRFPK 14	63C	NAVIGATE	REL Q	-054C 055C	/ 0			
	N.R.	6	INORGANIC	75/75	AI	TCVPC	114CY2.2G70%	1.02E 04			
5404	INVERTER	JB	KVRFPK 14	63C	NAVIGATE	REL Q	-054C 055C	/ 0			
	N.R.	6	INORGANIC	75/75	AI	TCVPC	141CY2.2G70%	1.29E 04			
5404	INVERTER	JB	KVRFPK 14	63C	NAVIGATE	REL Q	-054C 055C	/ 0			
	N.R.	6	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70%	6.36E 03			
5404	INVERTER	JB	KVRFPK 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	75/75	AU	TCVPC	114CY2.2G70%	2.04E 03			
5404	INVERTER	JB	KVRFPK 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	75/75	AU	TCVPC	141CY2.2G70%	2.58E 03			
5404	INVERTER	JB	KVRFPK 14	79C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70%	1.41E 03			
5404	GATE	JB	KVRFPK 14	79C	RADAR	CHECK Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59%	2.37E 03			
5404	GATE	JB	KVRFPK 14	79C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59%	3.12E 04			
5404	GATE	JB	KVRFPK 14	79C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	6	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59%	3.66E 04			

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5404	INVERTER	B-1	KVRFPK 14	33C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP		2.22E 07		
5404	INVERTER	B-1	KVRFPK 14	62C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	2.29E 05		
5404	INVERTER	B-1	KVRFPK 14	79C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	74/75	AU	TCVPC	178CY1.2G65X	4.19E 05		
5404	INVERTER	B-1	KVRFPK 14	33C	NAVIGATE	FIELD G	025C	/ 0		
	N.R.	6	INORGANIC	74/75	AI	N.A.		1.20E 04		
5404	INVERTER	B-1	KVRDIP 14	56C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	16CY 95X	7.73E 03		
5404	INVERTER	B-1	KVRDIP 14	60C	DISPLAY	REL Q	-054C 055C	/ 0		
	N.R.	6	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	6.62E 04		
5404	INVERTER	B-1	KVRDIP 14	76C	DISPLAY	RELPR Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	5.77E 04		
5404	INVERTER	B-1	KVRDIP 14	56C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	18CY 95X	3.78E 04		
5404	INVERTER	B-1	KVRDIP 14	56C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	INORGANIC	75/75	GT	EQP OP	24CY 95X	5.66E 03		
5404	INVERTER	B-2	KVRDIP 14	30C	SONAR	REL Q	025C	/ 0		
	N.R.	6	INORGANIC	74/75	NSS	EQP OP		2.01E 07		
5405	INVERTER	A-1	SNFPK 14		COMB/NOC	FIELD U	025	/ 0		
	N.R.	6	INORGANIC	72/74	SF	N.A.		3.11E 04		
5405	INVERTER	JB	KVRFPK 14	79C	RADAR	CHECK Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	1.41E 03		
5405	INVERTER	JB	KVRFPK 14	79C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	1.85E 04		
5405	INVERTER	JB	KVRFPK 14	79C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	2.18E 04		
5405	INVERTER	B-1	KVRFPK 14	33C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP		6.48E 05		
5405	INVERTER	B-1	KVRFPK 14	33C	NAVIGATE	FIELD G	025C	/ 0		
	N.R.	6	INORGANIC	74/75	AI	N.A.		3.42E 03		
5408	GATE	JB	KVRFPK 14	81C	RADAR	CHECK Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	1.15E 03		
5408	GATE	JB	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	1.52E 04		
5408	GATE	JB	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	1.78E 04		
5408	GATE	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	N.R.	4	INORGANIC	72/74	AI	N.A.		7.46E 04		
5408	GATE	B-1	KVRDIP 14	78C	DISPLAY	CHECK Q	-054C 071C	/ 0		
	N.R.	4	INORGANIC	74/74	AI	TCVPC	4CY 2.2G 62X	1.00E 03		

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5408	GATE	B-1	KVRDIP 14	78C	DISPLAY	REL Q	-054C 071C	/ 1	1/CATASTROPHIC:		
	N.R.	4	INORGANIC	74/75	AI	TCVPC	118CY2.2G53X	3.78E 04	METAL		
									PROCESS CONT:		
54107	FLIPFLOP	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0			
	JK	20	INORGANIC	72/74	SF	N.A.		4.56E 04			
54107	FLIPFLOP	A-1	KVRDIP 14	34C	COMB/NOC	FIELD U	025C	/ 0			
	JK	20	INORGANIC	72/74	SF	N.A.		1.71E 05			
54107	FLIPFLOP	B-1	KVRDIP 14	59C	DIG PROC	REL Q	-054C 050C	/ 0			
	JK	20	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.72E 04			
54107	FLIPFLOP	B-1	KVRDIP 14	59C	DIG PROC	REL Q	-054C 050C	/ 0			
	JK	20	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	2.25E 04			
5410	GATE	JB	KVRFPK 14	75C	RADAR	CHECK Q	-054C 071C	/ 0			
	N.R.	3	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	2.30E 03			
5410	GATE	JB	KVRFPK 14	75C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	3	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	3.03E 04			
5410	GATE	JB	KVRFPK 14	75C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	3	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	3.56E 04			
5410	GATE	B-1	KVRFPK 14	29C	DIG PROC	CHECK Q	025C	/ 0			
	N.R.	3	INORGANIC	73/75	AI	EQP OP		1.43E 07			
5410	GATE	B-1	KVRFPK 14	58C	DIG PROC	REL Q	-069C 054C	/ 0			
	N.R.	3	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.34E 05			
5410	GATE	B-1	KVRFPK 14	75C	DIG PROC	REL Q	-054C 071C	/ 0			
	N.R.	3	INORGANIC	74	AU	TCVPC	178CY1.2G65X	2.44E 05			
5410	GATE	B-1	KVRDIP 14	58C	DISPLAY	REL Q	-054C 055C	/ 0			
	N.R.	3	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	2.94E 04			
5410	GATE	B-1	KVRDIP 14	74C	DISPLAY	RELPR Q	-054C 071C	/ 0			
	N.R.	3	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	2.56E 04			
5410	GATE	B-2	KVRFPK 14	75C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	3	INORGANIC	74/74	ML	TCVPC	14CY 2.2G62X	1.62E 03			
5410	GATE	B-2	KVRDIP 14	28C	SONAR	REL Q	025C	/ 0			
	N.R.	3	INORGANIC	74/75	NSS	EQP OP		5.67E 04			
54111	FLIPFLOP	B-1	KVRDIP 16	61C	DIG PROC	REL Q	-054C 050C	/ 0			
	JK	16	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.40E 03			
54111	FLIPFLOP	B-1	KVRDIP 16	61C	DIG PROC	REL Q	-054C 050C	/ 0			
	JK	16	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	1.83E 03			
5411	GATE	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0			
	N.R.	3	INORGANIC	76/76	GF	N.A.		4.47E 03			
54121	FLIPFLOP	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0			
	MONOSTABLE	8	INORGANIC	72/74	SF	N.A.		7.78E 04			
54121	FLIPFLOP	A-1	KVRDIP 14	33C	COMB/NOC	FIELD U	025C	/ 0			
	MONOSTABLE	8	INORGANIC	72/74	SF	N.A.		2.02E 05			
54121	FLIPFLOP	A-1	SNFPK 14	37C	COMB/NOC	FIELD U	025C	/ 0			
	MONOSTABLE	8	INORGANIC	72/74	SF	N.A.		1.39E 05			

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
54121	FLIPFLOP	JB	KVRFPK 14	83C	RADAR	CHECK Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	1.60E 03			
54121	FLIPFLOP	JB	KVRFPK 14	83C	RADAR	REL Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	2.11E 04			
54121	FLIPFLOP	JB	KVRFPK 14	83C	RADAR	REL Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	2.48E 04			
54121	FLIPFLOP	B-1	KVRFPK 14	37C	DIG PROC	CHECK Q	025C	/ 0			
	MONOSTABLE	8	INORGANIC	73/75	AI	EQP OP		3.00E 06			
54121	FLIPFLOP	B-1	KVRFPK 14	66C	DIG PROC	REL Q	-069C 054C	/ 0			
	MONOSTABLE	8	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	2.53E 04			
54121	FLIPFLOP	B-1	KVRFPK 14	83C	DIG PROC	REL Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	74	AU	TCVPC	178CY1.2G65X	1.71E 04			
54121	FLIPFLOP	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0			
	MONOSTABLE	8	INORGANIC	74/75	AU	N.A.		6.83E 03			
54121	FLIPFLOP	B-1	KVRDIP 14	63C	DISPLAY	REL Q	-054C 055C	/ 0			
	MONOSTABLE	8	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	1.47E 04			
54121	FLIPFLOP	B-1	KVRDIP 14	79C	DISPLAY	RELPR Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	1.28E 04			
54121	FLIPFLOP	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0			
	MONOSTABLE	8	INORGANIC	72/74	AU	N.A.		3.42E 04			
54121	FLIPFLOP	B-1	KVRDIP 14	79C	RECORDER	REL Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	73/74	AU	TCVPC	411CY2.2G50X	1.97E 04			
54121	FLIPFLOP	B-1	KVRDIP 14	79C	RECORDER	RELPR Q	-054C 071C	/ 0			
	MONOSTABLE	8	INORGANIC	75/76	AU	TCVPC	139CY2.2G50X	6.66E 03			
54121	FLIPFLOP	B-2	KVRDIP 14	33C	SONAR	REL Q	025C	/ 0			
	MONOSTABLE	8	INORGANIC	74/75	NSS	EQP OP		2.60E 03			
54122	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD Q		/ 0			
	MONOSTABLE	10	INORGANIC	72/74	AI	N.A.		2.60E 03			
54122	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD Q		/ 0			
	MONOSTABLE	10	INORGANIC	72/74	AU	N.A.		2.60E 03			
54122	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD G		/ 0			
	MONOSTABLE	10	INORGANIC	74/75	AIU	N.A.		3.86E 03			
54123	FLIPFLOP	JB	KVRFPK 16	99C	RADAR	CHECK Q	-054C 071C	/ 0			
	MONOSTABLE	20	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	2.43E 03			
54123	FLIPFLOP	JB	KVRFPK 16	99C	RADAR	REL Q	-054C 071C	/ 0			
	MONOSTABLE	20	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	3.20E 04			
54123	FLIPFLOP	JB	KVRFPK 16	99C	RADAR	REL Q	-054C 071C	/ 0			
	MONOSTABLE	20	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	3.76E 04			
54123	FLIPFLOP	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0			
	MONOSTABLE	20	INORGANIC	72/74	AI	N.A.		1.30E 04			
54123	FLIPFLOP	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0			
	MONOSTABLE	20	INORGANIC	72/74	AU	N.A.		1.56E 04			

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54123	FLIPFLOP MONOSTABLE	B-1 20	KVRDIP 16 INORGANIC	74/75	RADAR AIU	FIELD Q N.A.		/ 1 2.12E 04	1/CATASTROPHIC
54126	GATE N.R.	B-1 4	P 14 INORGANIC	81C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 2.04E 03	
54126	GATE N.R.	B-1 4	P 14 INORGANIC	81C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 2.58E 03	
54126	GATE N.R.	B-1 4	P 14 INORGANIC	81C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 1.41E 03	
5412	GATE N.R.	JB 3	KVRFPK 14 INORGANIC	75C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 177CY2.2G59X	/ 0 1.68E 03	
5412	GATE N.R.	JB 3	KVRFPK 14 INORGANIC	75C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 208CY2.2G59X	/ 0 1.98E 03	
5413	GATE SCHMITT TRIG	B-1 2	KVRDIP 14 INORGANIC	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 7.53E 04	
5413	GATE SCHMITT TRIG	B-1 2	KVRDIP 14 INORGANIC	74/75	DIG PROC AIU	FIELD Q N.A.		/ 0 2.68E 03	
5413	GATE SCHMITT TRIG	B-1 2	KVRDIP 14 INORGANIC	76/76	RADAR GF	FIELD Q N.A.		/ 0 4.73E 04	
54150	MULTIPLEXER N.R.	JB 26	KVRDIP 24 INORGANIC	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 177CY2.2G59X	/ 0 1.68E 03	
54150	MULTIPLEXER N.R.	JB 26	KVRDIP 24 INORGANIC	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 208CY2.2G59X	/ 0 1.98E 03	
54150	MULTIPLEXER N.R.	B-1 26	KVRDIP 24 INORGANIC	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 8.52E 04	
54150	MULTIPLEXER N.R.	B-1 26	KVRDIP 24 INORGANIC	81C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 1.91E 04	
54150	MULTIPLEXER N.R.	B-1 26	KVRDIP 24 INORGANIC	81C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 1.99E 04	
54150	MULTIPLEXER N.R.	B-2 26	EADIP 24 INORGANIC	37C 74/74	PROCESS GBC	REL Q EQP OP	025C	/ 0 1.74E 03	
54151	MULTIPLEXER N.R.	B-1 11	KVRFPK 16 INORGANIC	42C 73/75	DIG PROC AI	CHECK Q EQP OP	025C	/ 0 1.30E 05	
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 INORGANIC	72/74	DISPLAY AI	FIELD Q N.A.		/ 0 5.97E 03	
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 INORGANIC	67C 74/75	DISPLAY AI	REL Q TCVPC	-054C 055C 409CY1.4G60X	/ 0 1.47E 04	
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 INORGANIC	83C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 3.02E 03	
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 INORGANIC	83C 75/76	DISPLAY AI	RELPR Q TCVPC	-054C 071C 178CY1.4G60X	/ 0 1.28E 04	

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54151	MULTIPLEXER	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0	
	N.R.	17	INORGANIC	72/74	AIU	N.A.		2.60E 03	
54151	MULTIPLEXER	B-1	KVRDIP 16		RADAR	FIELD G		/ 0	
	N.R.	17	INORGANIC	74/75	AIU	N.A.		1.93E 03	
54151	MULTIPLEXER	B-2	EADIP 16	38C	PROCESS	REL Q	025C	/ 0	
	N.R.	17	INORGANIC	74/74	GBC	EQP OP		1.74E 03	
54152	MULTIPLEXER	B-1	KVRFPK 14	42C	DIG PROC	CHECK Q	025C	/ 0	
	N.R.	15	INORGANIC	73/75	AI	EQP OP		1.30E 05	
54153	MULTIPLEXER	B-1	KVRFPK 16	47C	DIG PROC	CHECK Q	025C	/ 0	
	N.R.	16	INORGANIC	73/75	AI	EQP OP		2.59E 05	
54153	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0	
	N.R.	16	INORGANIC	72/74	AIU	N.A.		4.52E 05	
54153	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD G		/ 0	
	N.R.	16	INORGANIC	74/75	AIU	N.A.		1.61E 04	
54153	MULTIPLEXER	B-1	KVRDIP 16		NAVIGATE	FIELD G		/ 0	
	N.R.	16	INORGANIC	74/75	AIU	N.A.		3.43E 04	
54153	MULTIPLEXER	B-1	KVRDIP 16		DISPLAY	FIELD Q		/ 0	
	N.R.	16	INORGANIC	72/74	AI	N.A.		2.39E 04	
54153	MULTIPLEXER	B-1	KVRDIP 16	85C	DISPLAY	REL Q	-054C 071C	/ 0	
	N.R.	16	INORGANIC	74/75	AI	TCVPC	118CY2.2G53X	1.21E 04	
54153	MULTIPLEXER	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0	
	N.R.	16	INORGANIC	72/74	AIU	N.A.		7.81E 03	
54153	MULTIPLEXER	B-1	KVRDIP 16		RADAR	FIELD G		/ 0	
	N.R.	16	INORGANIC	74/75	AIU	N.A.		5.78E 03	
54153	MULTIPLEXER	B-2	KVRDIP 16	39C	SONAR	REL Q	025C	/ 0	
	N.R.	16	INORGANIC	74/75	NSS	EQP OP		1.15E 07	
54154	DECODE/DEMUX	B-1	KVRFPK 24	40C	SONAR	FIELD G	025C	/ 0	
	N.R.	25	INORGANIC	74/76	NSS	N.A.		5.41E 04	
54154	DECODE/DEMUX	B-1	KVRFPK 24	40C	SONAR	REL Q	025C	/ 0	
	N.R.	25	INORGANIC	74/74	NSS	EQP OP		7.83E 03	
54154	DECODE/DEMUX	B-1	KVRFPK 24		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	25	INORGANIC	74/74	NSS	VIB FTG	1 AXIS	1.33E 03	
						EQP OP	025C	/ 0	
								3.98E 03	
54154	DECODE/DEMUX	B-1	KVRDIP 24	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	25	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	3.22E 03	
54154	DECODE/DEMUX	B-1	KVRDIP 24	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	25	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	4.21E 03	

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T-1. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
154154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 INORGANIC	81C 72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 6.39E 04		
154154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 INORGANIC	81C 74/74	DIG PROC AIU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 2.86E 04		
154154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 INORGANIC	81C 74/75	DIG PROC AIU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 1.49E 04		
154154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 INORGANIC	81C 72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 7.53E 04		
154154	DECODE/DEMUX N.R.	B-1 25	KVRDIP 24 INORGANIC	81C 74/75	DIG PROC AIU	FIELD G N.A.		/ 0 2.68E 03		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 9.94E 03		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.30E 04		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	65C 74/75	DISPLAY AI	NAVIGATE FIELD G N.A.		/ 0 1.85E 04		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	65C 74/75	DISPLAY AI	REL Q TCVPC	-054C 055C 409CY1.4G60X	/ 0 1.47E 04		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	81C 75/76	DISPLAY AI	RELPR Q TCVPC	-054C 071C 178CY1.4G60X	/ 0 1.28E 04		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	81C 76/76	DISPLAY GF	FIELD Q N.A.		/ 0 2.56E 03		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	81C 72/74	DISPLAY AIU	FIELD Q N.A.		/ 0 2.08E 04		
154155	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	81C 74/75	DISPLAY AIU	FIELD G N.A.		/ 0 1.54E 04		
154156	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.06E 04		
154156	DECODE/DEMUX N.R.	B-1 15	KVRDIP 16 INORGANIC	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.39E 04		
154157	MULTIPLEXER N.R.	JB 15	KVRFPK 16 INORGANIC	89C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 177CY2.2G59X	/ 0 3.37E 03		
154157	MULTIPLEXER N.R.	JB 15	KVRFPK 16 INORGANIC	89C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 208CY2.2G59X	/ 0 3.96E 03		
154157	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 INORGANIC	89C 74/75	RADAR AIU	FIELD G N.A.		/ 0 1.85E 04		
154160	COUNTER DECADE	B-1 60	KVRDIP 16 INORGANIC	89C 76/76	RADAR GF	FIELD Q N.A.		/ 0 4.15E 03		

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54161	COUNTER BINARY	JB 37	KVRFPK 16 INORGANIC	109C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 177CY2.2G59X	/ 0 9.26E 03	
54161	COUNTER BINARY	JB 37	KVRFPK 16 INORGANIC	109C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 208CY2.2G59X	/ 0 1.09E 04	
54161	COUNTER BINARY	B-1 37	KVRDIP 16 INORGANIC	109C 76/76	RADAR GF	FIELD Q N.A.	-054C 071C	/ 0 9.27E 03	
54163	COUNTER BINARY	B-1 58	KVRDIP 16 INORGANIC	109C 74/75	NAVIGATE AU	FIELD G N.A.	-054C 071C	/ 0 3.43E 04	
54163	COUNTER BINARY	B-1 58	KVRDIP 16 INORGANIC	109C 72/74	DISPLAY AI	FIELD Q N.A.	-054C 071C	/ 0 2.68E 04	
54163	COUNTER BINARY	B-1 58	KVRDIP 16 INORGANIC	97C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 1.36E 04	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	77C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 114CY2.2G70X	/ 0 7.15E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	77C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 141CY2.2G70X	/ 0 9.04E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	77C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 78CY 2.2G70X	/ 0 4.95E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	93C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 114CY2.2G70X	/ 0 2.04E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	93C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 141CY2.2G70X	/ 0 2.58E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	93C 75/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 78CY 2.2G70X	/ 0 1.41E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	93C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 177CY2.2G59X	/ 0 6.74E 03	
54164	SHIFT REG N.R.	JB 36	KVRFPK 14 INORGANIC	93C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 208CY2.2G59X	/ 0 7.92E 03	
54164	SHIFT REG N.R.	B-1 36	KVRFPK 14 INORGANIC	47C 74/75	NAVIGATE AI	FIELD G N.A.	025C	/ 0 3.42E 03	
54164	SHIFT REG N.R.	B-1 36	KVRFPK 14 INORGANIC	47C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 5.41E 05	
54164	SHIFT REG N.R.	B-1 36	KVRFPK 14 INORGANIC	47C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 7.83E 04	
54164	SHIFT REG N.R.	B-1 36	KVRFPK 14 INORGANIC	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.33E 04	
54164	SHIFT REG N.R.	B-1 36	KVRFPK 14 INORGANIC	74/74	SONAR NSS	EQP OP	025C	/ 0 3.98E 04	
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 INORGANIC	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 1.51E 05	
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 INORGANIC	74/75	DIG PROC AIU	FIELD G N.A.		/ 0 5.36E 03	
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 INORGANIC	74/75	NAVIGATE AU	FIELD G N.A.		/ 0 5.28E 03	
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 INORGANIC	72/74	DISPLAY AI	FIELD Q N.A.		/ 0 8.95E 03	

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
54164	SHIFT REG N.R.	B-1 36	KVRDIP 14 INORGANIC	86C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 4.53E 03			
54164	SHIFT REG N.R.	B-2 36	KVRFPK 14 INORGANIC	93C 74/74	NAVIGATE ML	REL Q TCVPC	-054C 071C 14CY 2.2G62X	/ 0 1.08E 03			
54174	FLIPFLOP D	B-1 36	KVRDIP 16 INORGANIC	63C 74/75	NAVIGATE AU	FIELD G N.A.		/ 0 2.11E 04			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	63C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 3.09E 03			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	62C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 7.28E 04			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	62C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 9.52E 04			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	63C 74/75	NAVIGATE AU	FIELD G N.A.		/ 0 2.64E 04			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	63C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 1.51E 04			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	63C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 2.52E 03			
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	63C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 2.26E 03			
54180	GENERATOR N.R.	B-1 14	KVRFPK 14 INORGANIC	47C 73/75	DIG PROC AI	CHECK Q EQP OP	025C	/ 0 6.92E 06			
54180	GENERATOR N.R.	B-1 14	KVRFPK 14 INORGANIC	76C 75/75	DIG PROC AI	REL Q TCVPC	-069C 054C 14CY .71G62X	/ 0 6.22E 04			
54180	GENERATOR N.R.	B-1 14	KVRFPK 14 INORGANIC		RADAR AU	FIELD Q N.A.		/ 0 1.30E 04			
54180	GENERATOR N.R.	B-1 14	KVRFPK 14 INORGANIC		RADAR AIU	FIELD G N.A.		/ 0 9.64E 03			
54180	GENERATOR N.R.	B-1 14	KVRDIP 14 INORGANIC		DISPLAY AI	FIELD Q N.A.		/ 0 1.19E 04			
54180	GENERATOR N.R.	B-1 14	KVRDIP 14 INORGANIC	86C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 6.04E 03			
54182	GENERATOR N.R.	B-1 19	KVRFPK 16 INORGANIC	47C 73/75	DIG PROC AI	CHECK Q EQP OP	025C	/ 0 8.44E 04			
54182	GENERATOR N.R.	B-1 19	KVRFPK 16 INORGANIC	76C 75/75	DIG PROC AI	REL Q TCVPC	-069C 054C 14CY .71G62X	/ 0 1.23E 03			
54182	GENERATOR N.R.	B-1 19	KVRFPK 16 INORGANIC	93C 74	DIG PROC AU	REL Q TCVPC	-054C 071C 178CY1.2G65X	/ 0 8.56E 03			

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54182	GENERATOR	B-1	KVRDIP 16			RADAR	FIELD Q	/ 0		
	N.R.	19	INORGANIC	72/74		AU	N.A.	2.60E 03		
54182	GENERATOR	B-1	KVRDIP 16			RADAR	FIELD G	/ 0		
	N.R.	19	INORGANIC	74/75		AU	N.A.	1.93E 03		
54191	COUNTER	B-1	KVRFPK 16	64C		NAVIGATE	FIELD G	025C	/ 0	
	BINARY	60	INORGANIC	74/75		AI	N.A.	6.83E 03		
54191	COUNTER	B-1	KVRFPK 16	64C		SONAR	FIELD G	025C	/ 0	
	BINARY	60	INORGANIC	74/76		NSS	N.A.	1.08E 05		
54191	COUNTER	B-1	KVRFPK 16	64C		SONAR	REL Q	025C	/ 0	
	BINARY	60	INORGANIC	74/74		NSS	EQP OP	1.57E 04		
54191	COUNTER	B-1	KVRFPK 16			SONAR	CHECK Q	28HZ 1.3G	/ 0	
	BINARY	60	INORGANIC	74/74		NSS	VIB FTG	1 AXIS	2.66E 03	
							EQP OP	025C	/ 0	
								7.96E 03		
54191	COUNTER	B-1	KVRDIP 16	76C		DIG PROC	REL Q	-054C 050C	/ 0	
	BINARY	60	N.R.	75/75		AI	TCVPC	13CY1.3G 62X	1.51E 04	
54191	COUNTER	B-1	KVRDIP 16	76C		DIG PROC	REL Q	-054C 050C	/ 0	
	BINARY	60	N.R.	75/75		AI	TCVPC	17CY1.3G 62X	1.98E 04	
54191	COUNTER	B-1	KVRDIP 16	30C		DISPLAY	REL G	004C 051C	/ 0	
	BINARY	60	N.R.	75/75		GT	EQP OP	18CY 95X	1.72E 04	
54191	COUNTER	B-1	KVRDIP 16			RADAR	FIELD Q	/ 0		
	BINARY	60	N.R.	76/76		GF	N.A.	3.52E 03		
54192	COUNTER	B-1	KVRFPK 16			RADAR	FIELD Q	/ 0		
	DECADE	50	INORGANIC	72/74		AU	N.A.	7.81E 03		
54192	COUNTER	B-1	KVRFPK 16			RADAR	FIELD G	/ 0		
	DECADE	50	INORGANIC	74/75		AU	N.A.	5.78E 03		
54193	COUNTER	JB	KVRFPK 16	110C		RADAR	REL Q	-054C 071C	/ 0	
	BINARY	48	INORGANIC	74/74		AU	TCVPC	177CY2.2G59X	6.74E 03	
54193	COUNTER	JB	KVRFPK 16	110C		RADAR	REL Q	-054C 071C	/ 0	
	BINARY	48	INORGANIC	74/74		AU	TCVPC	208CY2.2G59X	7.92E 03	
54193	COUNTER	B-1	KVRFPK 16	64C		DIG PROC	CHECK Q	025C	/ 0	
	BINARY	48	INORGANIC	73/75		AI	EQP OP	8.30E 06		
54193	COUNTER	B-1	KVRFPK 16	110C		DIG PROC	REL Q	-054C 071C	/ 0	
	BINARY	48	INORGANIC	74		AU	TCVPC	178CY1.2G65X	8.13E 04	
54193	COUNTER	B-1	KVRFPK 16			RADAR	FIELD Q	/ 0		
	BINARY	48	INORGANIC	72/74		AU	N.A.	4.43E 04		
54193	COUNTER	B-1	KVRFPK 16			RADAR	FIELD G	/ 0		
	BINARY	48	INORGANIC	74/75		AU	N.A.	3.28E 04		
54193	COUNTER	B-2	KVRDIP 16	51C		SONAR	REL Q	025C	/ 0	
	BINARY	48	INORGANIC	74/75		NSS	EQP OP	2.32E 04		

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP	TEST	APPL.	TEST		PART		
		GATES	PROTECT.	DATE	ENV.	TYPE		HOURS		
54195	SHIFT REG	B-1	KVRDIP 16	66C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	53	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	6.72E 03		
54195	SHIFT REG	B-1	KVRDIP 16	66C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	53	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	8.78E 03		
54196	COUNTER	B-1	KVRFFK 14	56C	SONAR	FIELD G	025C	/ 0		
	DECADE	39	INORGANIC	74/76	NSS	N.A.		5.95E 05		
54196	COUNTER	B-1	KVRFFK 14	56C	SONAR	REL Q	025C	/ 0		
	DECADE	39	INORGANIC	74/74	NSS	EQP OP		8.62E 04		
54196	COUNTER	B-1	KVRFFK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	DECADE	39	INORGANIC	74/74	NSS	VIB FTG	1 AXIS	1.46E 04		
						EQP OP	025C	/ 0		
								4.38E 04		
54197	COUNTER	B-1	KVRFFK 14	56C	SONAR	FIELD G	025C	/ 0		
	BINARY	34	INORGANIC	74/76	NSS	N.A.		5.41E 04		
54197	COUNTER	B-1	KVRFFK 14	56C	SONAR	REL Q	025C	/ 0		
	BINARY	34	INORGANIC	74/74	NSS	EQP OP		7.83E 03		
54197	COUNTER	B-1	KVRFFK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	BINARY	34	INORGANIC	74/74	NSS	VIB FTG	1 AXIS	1.33E 03		
						EQP OP	025C	/ 0		
								3.98E 03		
54197	COUNTER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	BINARY	34	INORGANIC	72/74	AIU	N.A.		2.26E 05		
54197	COUNTER	B-2	KVRFFK 14	102C	NAVIGATE	REL Q	-054C 071C	/ 0		
	BINARY	34	INORGANIC	74/74	ML	TCVPC	14CY 2.2G62X	1.62E 03		
5420	GATE	JB	KVRFFK 14	58C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	114CY2.2G70X	6.13E 03		
5420	GATE	JB	KVRFFK 14	58C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	7.75E 03		
5420	GATE	JB	KVRFFK 14	58C	NAVIGATE	REL Q	-054C 055C	/ 0		
	N.R.	2	INORGANIC	75/75	AI	TCVPC	78CY 2.2G70X	4.24E 03		
5420	GATE	JB	KVRFFK 14	74C	RADAR	CHECK Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	2.24E 03		
5420	GATE	JB	KVRFFK 14	74C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	2.95E 04		
5420	GATE	JB	KVRFFK 14	74C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	3.47E 04		
5420	GATE	B-1	KVRFFK 14	28C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	2	INORGANIC	73/75	AI	EQP OP		7.78E 06		

DIGITAL DEVICE DATA

T-I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5420	GATE	B-1	KVRFPK 14	57C	DIG PROC	REL Q	-069C 054C	/ 0	
	N.R.	2	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	6.75E 04	
5420	GATE	B-1	KVRFPK 14	74C	DIG PROC	REL Q	-054C 071C	/ 0	
	N.R.	2	INORGANIC	/74	AU	TCVPC	178CY1.2G65X	1.58E 05	
5420	GATE	B-1	KVRFPK 14	28C	NAVIGATE	FIELD G	025C	/ 0	
	N.R.	2	INORGANIC	74/75	AI	N.A.		1.71E 03	
5420	GATE	B-1	KVRDIP 14	57C	DISPLAY	REL Q	-054C 055C	/ 0	
	N.R.	2	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	2.21E 04	
5420	GATE	B-1	KVRDIP 14	73C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	N.R.	2	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	1.92E 04	
5420	GATE	B-2	KVRDIP 14	27C	SONAR	REL Q	025C	/ 1	1/OXIDE
	N.R.	2	INORGANIC	74/75	NSS	EQP OP		6.94E 06	
5423	GATE	B-1	KVRDIP 16	54C	DIG PROC	REL Q	-054C 050C	/ 0	
	EXPANDABLE	2	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	1.40E 03	
5423	GATE	B-1	KVRDIP 16	54C	DIG PROC	REL Q	-054C 050C	/ 0	
	EXPANDABLE	2	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	1.83E 03	
5425	GATE	B-1	KVRDIP 14	52C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	2	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	2.38E 04	
5425	GATE	B-1	KVRDIP 14	52C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	2	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	3.11E 04	
5427	GATE	B-1	KVRFPK 14	33C	SONAR	FIELD G	025C	/ 0	
	N.R.	3	INORGANIC	74/76	NSS	N.A.		3.25E 05	
5427	GATE	B-1	KVRFPK 14	33C	SONAR	REL Q	025C	/ 0	
	N.R.	3	INORGANIC	74/74	NSS	EQP OP		4.70E 04	
5427	GATE	B-1	KVRFPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	3	INORGANIC	74/74	NSS	VIB FTG	1 AXIS	7.97E 03	
						EQP OP	025C	/ 0	
								2.39E 04	
5427	GATE	B-1	KVRDIP 14	56C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	2.14E 04	
5427	GATE	B-1	KVRDIP 14	56C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	2.80E 04	
54298	MULTIPLEXER	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0	
	N.R.	51	INORGANIC	76/76	GF	N.A.		4.47E 03	
5430	GATE	JB	KVRFPK 14	56C	NAVIGATE	REL Q	-054C 055C	/ 0	
	N.R.	1	INORGANIC	75/75	AI	TCVPC	141CY2.2G70X	1.29E 03	
5430	GATE	JB	KVRFPK 14	72C	RADAR	CHECK Q	-054C 071C	/ 0	
	N.R.	1	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	1.54E 03	

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5430	GATE N.R.	JB 1	KVRFPK 14 INORGANIC	72C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 177CY2.2G59X	/ 0 2.02E 04		
5430	GATE N.R.	JB 1	KVRFPK 14 INORGANIC	72C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 208CY2.2G59X	/ 0 2.38E 04		
5430	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	26C 73/75	DIG PROC AI	CHECK Q EQP OP	025C	/ 0 6.72E 06		
5430	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	55C 75/75	DIG PROC AI	REL Q TCVPC	-069C 054C 14CY .71G62X	/ 0 8.38E 04		
5430	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	72C 74	DIG PROC AU	REL Q TCVPC	-054C 071C 178CY1.2G65X	/ 1 8.13E 04	1/SHORT PROCESS DES	
5430	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	26C 74/75	NAVIGATE AI	FIELD G N.A.	025C	/ 0 3.42E 03		
5430	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC	56C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 114CY2.2G70X	/ 0 1.02E 03		
5430	GATE N.R.	B-1 1	KVRFPK 14 INORGANIC		RADAR AIU	FIELD G N.A.		/ 0 2.53E 05		
5430	GATE N.R.	B-1 1	KVRDIP 14 INORGANIC	56C 74/75	DISPLAY AI	REL Q TCVPC	-054C 055C 409CY1.4G60X	/ 0 7.36E 03		
5430	GATE N.R.	B-1 1	KVRDIP 14 INORGANIC	72C 75/76	DISPLAY AI	RELPR Q TCVPC	-054C 071C 178CY1.4G60X	/ 0 6.41E 03		
5430	GATE N.R.	B-2 1	KVRDIP 14 INORGANIC	26C 74/75	SONAR NSS	REL Q EQP OP	025C	/ 0 3.04E 06		
5437	BUFFER N.R.	JB 4	KVRFPK 14 INORGANIC	69C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 114CY2.2G70X	/ 0 3.06E 03		
5437	BUFFER N.R.	JB 4	KVRFPK 14 INORGANIC	69C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 141CY2.2G70X	/ 0 3.87E 03		
5437	BUFFER N.R.	JB 4	KVRFPK 14 INORGANIC	69C 75/75	NAVIGATE AI	REL Q TCVPC	-054C 055C 78CY 2.2G70X	/ 0 1.41E 03		
5437	BUFFER N.R.	B-1 4	KVRFPK 14 INORGANIC	39C 74/75	NAVIGATE AI	FIELD G N.A.	025C	/ 0 1.71E 03		
5437	BUFFER N.R.	B-1 4	KVRFPK 14 INORGANIC		NAVIGATE AU	FIELD G N.A.		/ 0 1.06E 04		
5437	BUFFER N.R.	B-1 4	KVRDIP 14 INORGANIC	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 2.32E 03		
5437	BUFFER N.R.	B-1 4	KVRDIP 14 INORGANIC		DISPLAY AI	FIELD Q N.A.		/ 0 1.79E 04		
5437	BUFFER N.R.	B-1 4	KVRDIP 14 INORGANIC	81C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 9.06E 03		
5437	BUFFER N.R.	B-1 4	KVRDIP 14 INORGANIC	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 1.13E 04		
5437	BUFFER N.R.	B-1 4	KVRDIP 14 INORGANIC	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 1.70E 03		

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5438	BUFFER	B-1	KVRFPK 14	38C	DIG PROC	CHECK Q	025C	/ 2	1/ OPEN	
	N.R.	4	INORGANIC	73/75	AI	EQP OP		1.56E 07	INTERCONNECT	
5438	BUFFER	B-1	KVRFPK 14	67C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	4	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	3.11E 05		
5440	BUFFER	A-1	KVRDIP 14	30C	COMB/NOG	FIELD U	025C	/ 0		
	N.R.	2	INORGANIC	72/74	SF	N.A.		3.11E 04		
5440	BUFFER	B-1	KVRFPK 14	32C	NAVIGATE	FIELD G	025C	/ 0		
	N.R.	2	INORGANIC	74/75	AI	N.A.		1.71E 03		
5447A	INTERFACE	B-1	KVRFPK 16	63C	SONAR	FIELD G	025C	/ 0		
	DECODE/DRIVER	44	INORGANIC	74/76	NSS	N.A.		6.49E 05		
5447A	INTERFACE	B-1	KVRFPK 16	63C	SONAR	REL Q	025C	/ 0		
	DECODE/DRIVER	44	INORGANIC	74/74	NSS	EQP OP		9.40E 04		
5447A	INTERFACE	B-1	KVRFPK 16		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	DECODE/DRIVER	44	INORGANIC	74/74	NSS	VIB FTG	1 AXIS	1.59E 04		
						EQP OP	025C	/ 0		
								4.78E 04		
54490	COUNTER	B-1	KVRDIP 16	170C	NA	LIFE Q	150C	77/ 0		
	DECADE	66	INORGANIC	74/74	NA	BAKE		7.70E 04		
54490	COUNTER	B-1	KVRDIP 16	125C	NA	LIFE Q	125C	129/ 1	1/DEGRADED	
	DECADE	66	INORGANIC	74/74	NA	REVBias		1.29E 05		
5451	GATE	B-1	KVRFPK 14	29C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	6	INORGANIC	73/75	AI	EQP OP		1.28E 07		
5451	GATE	B-1	KVRFPK 14	58C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	6	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.15E 05		
5451	GATE	B-1	KVRFPK 14	75C	DIG PROC	REL Q	-054C 071C	/ 2	1/SHORT	
	N.R.	6	INORGANIC	74	AU	TCVPC	178CY1.2G65X	2.61E 05	PROCESS DES	
									1/SHORT	
5451	GATE	B-1	KVRDIP 14	74C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	6	INORGANIC	74/74	AU	TCVPC	707CY 1G 56X	8.58E 04		
5451	GATE	B-2	KVRDIP 14	28C	SONAR	REL Q	025C	/ 0		
	N.R.	6	INORGANIC	74/75	NSS	EQP OP		2.73E 06		
5453	GATE	B-1	KVRDIP 14	57C	DISPLAY	REL Q	-054C 055C	/ 0		
	EXPANDABLE	5	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	7.36E 03		
5453	GATE	B-1	KVRDIP 14	73C	DISPLAY	RELPR Q	-054C 071C	/ 0		
	EXPANDABLE	5	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	6.41E 03		
5454	GATE	B-1	KVRFPK 14	28C	DIG PROC	CHECK Q	025C	/ 0		
	N.R.	5	INORGANIC	73/75	AI	EQP OP		1.12E 06		
5454	GATE	B-1	KVRFPK 14	57C	DIG PROC	REL Q	-069C 054C	/ 0		
	N.R.	5	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.02E 04		

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5454	GATE	B-1	KVRFPK 14	74C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	5	INORGANIC	74	AU	TCVPC	178CY1.2G65X	6.85E 04		
5470	FLIPFLOP	A-1	KVRDIP 14	31C	COMB/NOC	FIELD U	025C	/ 0		
	JK	11	INORGANIC	72/74	SF	N.A.		4.67E 04		
5470	FLIPFLOP	JB	KVRFPK 14	79C	RADAR	REL Q	-054C 071C	/ 0		
	JK	11	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	6.74E 03		
5470	FLIPFLOP	JB	KVRFPK 14	79C	RADAR	REL Q	-054C 071C	/ 0		
	JK	11	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	7.92E 03		
5470	FLIPFLOP	B-1	KVRFPK 14	33C	DIG PROC	CHECK Q	025C	/ 0		
	JK	11	INORGANIC	73/75	AI	EQP OP		8.44E 04		
5470	FLIPFLOP	B-1	KVRFPK 14	62C	DIG PROC	REL Q	-069C 054C	/ 0		
	JK	11	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	1.23E 03		
5470	FLIPFLOP	B-1	KVRFPK 14	33C	NAVIGATE	FIELD G	025C	/ 0		
	JK	11	INORGANIC	74/75	AI	N.A.		1.71E 03		
5472	FLIPFLOP	A-1	P 0	35C	COMB/NOC	FIELD U	025C	/ 0		
	JK	10	INORGANIC	72/74	SF	N.A.		9.33E 04		
5472	FLIPFLOP	A-1	SNFPK 14	32C	COMB/NOC	FIELD U	025C	/ 0		
	JK	10	INORGANIC	72/74	SF	N.A.		2.79E 05		
5473	FLIPFLOP	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0		
	JK	16	INORGANIC	72/74	SF	N.A.		7.78E 04		
5473	FLIPFLOP	B-1	KVRFPK 14	38C	DIG PROC	CHECK Q	025C	/ 0		
	JK	16	INORGANIC	73/75	AI	EQP OP		1.30E 05		
5473	FLIPFLOP	B-1	KVRDIP 14	60C	DISPLAY	REL G	004C 051C	/ 0		
	JK	16	INORGANIC	75/75	GT	EQP OP	18CY 95X	2.65E 04		
5473	FLIPFLOP	B-1	KVRDIP 14	60C	DISPLAY	REL G	004C 051C	/ 0		
	JK	16	INORGANIC	75/75	GT	EQP OP	24CY 95X	3.96E 03		
5474	FLIPFLOP	JB	KVRFPK 14	82C	RADAR	REL Q	-054C 071C	/ 0		
	D	12	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	8.42E 03		
5474	FLIPFLOP	JB	KVRFPK 14	82C	RADAR	REL Q	-054C 071C	/ 0		
	D	12	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	9.90E 03		
5474	FLIPFLOP	B-1	KVRFPK 14	36C	DIG PROC	CHECK Q	025C	/ 0		
	D	12	INORGANIC	73/75	AI	EQP OP		3.93E 07		
5474	FLIPFLOP	B-1	KVRFPK 14	65C	DIG PROC	REL Q	-069C 054C	/ 0		
	D	12	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	3.43E 05		
5474	FLIPFLOP	B-1	KVRFPK 14	82C	DIG PROC	REL Q	-054C 071C	/ 0		
	D	12	INORGANIC	74	AU	TCVPC	178CY1.2G65X	3.98E 05		
5474	FLIPFLOP	B-1	KVRFPK 14	36C	NAVIGATE	FIELD G	025C	/ 0		
	D	12	INORGANIC	74/75	AI	N.A.		6.83E 03		
5474	FLIPFLOP	B-1	KVRDIP 14	63C	DISPLAY	REL Q	-054C 055C	/ 0		
	D	12	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	4.41E 04		
5474	FLIPFLOP	B-1	KVRDIP 14	79C	DISPLAY	RELPR Q	-054C 071C	/ 0		
	D	12	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	3.85E 04		
5474	FLIPFLOP	B-1	KVRDIP 14		RADAR	FIELD Q		/ 0		
	D	12	INORGANIC	76/76	GF	N.A.		6.68E 04		

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T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5474	FLIPFLOP	B-2	KVRDIP 14	33C	SONAR	REL Q	025C	/ 0	
	D	12	INORGANIC	74/75	NSS	EQP OP		9.03E 06	
5475	LATCH	B-1	KVRDIP 16	84C	NAVIGATE	REL Q	-054C 071C	/ 0	
	BISTABLE	24	INORGANIC	75/75	AU	TCVPC	114CY2.2G70X	4.08E 03	
5475	LATCH	B-1	KVRDIP 16	84C	NAVIGATE	REL Q	-054C 071C	/ 0	
	BISTABLE	24	INORGANIC	75/75	AU	TCVPC	141CY2.2G70X	5.16E 03	
5475	LATCH	B-1	KVRDIP 16	84C	NAVIGATE	REL Q	-054C 071C	/ 0	
	BISTABLE	24	INORGANIC	75/75	AU	TCVPC	78CY 2.2G70X	2.83E 03	
5475	LATCH	B-1	KVRDIP 16	68C	DISPLAY	REL Q	-054C 055C	/ 0	
	BISTABLE	24	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	4.41E 04	
5475	LATCH	B-1	KVRDIP 16	84C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	BISTABLE	24	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	3.83E 04	
5475	LATCH	B-2	EADIP 16	39C	PROCESS	REL Q	025C	/ 0	
	BISTABLE	24	INORGANIC	74/74	GBC	EQP OP		1.74E 04	
5476	FLIPFLOP	JB	KVRFFK 16	83C	RADAR	REL Q	-054C 071C	/ 0	
	JK	16	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	7.58E 03	
5476	FLIPFLOP	JB	KVRFFK 16	83C	RADAR	REL Q	-054C 071C	/ 0	
	JK	16	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	8.91E 03	
5476	FLIPFLOP	B-1	KVRDIP 16	58C	DIG PROC	REL Q	-054C 050C	/ 0	
	JK	16	INORGANIC	75/75	AI	TCVPC	13CY1.3G 62X	2.52E 03	
5476	FLIPFLOP	B-1	KVRDIP 16	58C	DIG PROC	REL Q	-054C 050C	/ 0	
	JK	16	INORGANIC	75/75	AI	TCVPC	17CY1.3G 62X	3.29E 03	
5476	FLIPFLOP	B-1	KVRDIP 16		DISPLAY	FIELD Q		/ 0	
	JK	16	INORGANIC	72/74	AI	N.A.		2.98E 03	
5476	FLIPFLOP	B-1	KVRDIP 16	79C	DISPLAY	REL Q	-054C 071C	/ 0	
	JK	16	INORGANIC	74/75	AI	TCVPC	118CY2.2G53X	1.51E 03	
5477	LATCH	B-1	KVRFFK 14		RADAR	FIELD Q		/ 0	
	BISTABLE	24	INORGANIC	72/74	AU	N.A.		2.86E 04	
5477	LATCH	B-1	KVRFFK 14		RADAR	FIELD G		/ 0	
	BISTABLE	24	INORGANIC	74/75	AIU	N.A.		2.12E 04	
5482	ADDER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0	
	FULL	21	INORGANIC	72/74	AU	N.A.		2.13E 04	
5482	ADDER	B-1	KVRDIP 14	87C	DIG PROC	REL Q	-054C 071C	/ 0	
	FULL	21	INORGANIC	74/74	AU	TCVPC	707CY 1G 56X	9.54E 03	
5482	ADDER	B-1	KVRDIP 14	87C	DIG PROC	RELPR Q	-054C 071C	/ 0	
	FULL	21	INORGANIC	74/75	AU	TCVPC	368CY 1G 56X	4.97E 03	
5482	ADDER	B-2	KVRDIP 14	41C	SONAR	REL Q	025C	/ 0	
	FULL	21	INORGANIC	74/75	NSS	EQP OP		7.16E 05	

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5483	ADDER FULL	B-1 36	KVRFPK 16 :INORGANIC	72C 74/75	NAVIGATE :AI	FIELD G :N.A.	025C	/ 0 6.83E 03	
5483	ADDER FULL	B-1 36	KVRDIP 16 :INORGANIC	81C 75/75	DIG PROC :AI	REL Q :TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.10E 03	
5483	ADDER FULL	B-2 36	KVRDIP 16 :INORGANIC	56C 74/75	SONAR :NSS	REL Q :EQP OP	025C	/ 0 2.67E 06	
5483A	ADDER FULL	B-1 36	KVRDIP 16 :INORGANIC		RADAR :GF	FIELD Q :N.A.		/ 0 2.56E 04	
5485	COMPARATOR :N.R.	B-1 31	KVRFPK 16 :INORGANIC	50C 73/75	DIG PROC :AI	CHECK Q :EQP OP	025C	/ 0 6.48E 05	
5485	COMPARATOR :N.R.	B-1 31	KVRFPK 16 :INORGANIC	79C 75/75	DIG PROC :AI	REL Q :TCVPC	-069C 054C 14CY .71G62X	/ 0 1.54E 03	
5485	COMPARATOR :N.R.	B-1 31	KVRFPK 16 :INORGANIC	58C 74/76	SONAR :NSS	FIELD G :N.A.	025C	/ 0 2.16E 05	
5485	COMPARATOR :N.R.	B-1 31	KVRFPK 16 :INORGANIC	58C 74/74	SONAR :NSS	REL Q :EQP OP	025C	/ 0 3.13E 04	
5485	COMPARATOR :N.R.	B-1 31	KVRFPK 16 :INORGANIC		SONAR :NSS	CHECK Q :VIB FTG	28HZ 1.3G 1 AXIS	/ 0 5.31E 03	
						EQP OP	025C	/ 0 1.59E 04	
5485	COMPARATOR :N.R.	B-1 31	KVRDIP 16 :INORGANIC	72C 75/75	DIG PROC :AI	REL Q :TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.44E 04	
5485	COMPARATOR :N.R.	B-1 31	KVRDIP 16 :INORGANIC	72C 75/75	DIG PROC :AI	REL Q :TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.88E 04	
5485	COMPARATOR :N.R.	B-1 31	KVRDIP 16 :INORGANIC		RADAR :GF	FIELD Q :N.A.		/ 0 1.37E 04	
5486	GATE :N.R.	B-1 4	KVRFPK 14 :INORGANIC	45C 73/75	DIG PROC :AI	CHECK Q :EQP OP	025C	/ 0 1.84E 06	
5486	GATE :N.R.	B-1 4	KVRFPK 14 :INORGANIC	74C 75/75	DIG PROC :AI	REL Q :TCVPC	-069C 054C 14CY .71G62X	/ 0 1.34E 04	
5486	GATE :N.R.	B-1 4	KVRFPK 14 :INORGANIC	91C 74	DIG PROC :AU	REL Q :TCVPC	-054C 071C 178CY1.2G65X	/ 0 6.85E 04	
5486	GATE :N.R.	B-1 4	KVRDIP 14 :INORGANIC	64C 75/75	DIG PROC :AI	REL Q :TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.41E 04	
5486	GATE :N.R.	B-1 4	KVRDIP 14 :INORGANIC	64C 75/75	DIG PROC :AI	REL Q :TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.85E 04	
5486	GATE :N.R.	B-1 4	KVRDIP 14 :INORGANIC	69C 74/75	DISPLAY :AI	REL Q :TCVPC	-054C 055C 409CY1.4G60X	/ 0 2.94E 04	
5486	GATE :N.R.	B-1 4	KVRDIP 14 :INORGANIC	85C 75/76	DISPLAY :AI	RELPR Q :TCVPC	-054C 071C 178CY1.4G60X	/ 0 2.56E 04	

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5486	GATE	B-2	KVRDIP 14	39C	SONAR	REL Q	025C	/ 0	
	N.R.	4	INORGANIC	74/75	NSS	EQP OP		1.80E 04	
5490	COUNTER	A-1	P 14	35C	COMB/NOC	FIELD U	025C	/ 0	
	DECADE	15	INORGANIC	72/74	SF	N.A.		3.11E 04	
5490	COUNTER	A-1	SNFPK 14	46C	COMB/NOC	FIELD U	025C	/ 0	
	DECADE	15	INORGANIC	72/74	SF	N.A.		4.67E 04	
5490A	COUNTER	JB	KVRFPK 14	90C	RADAR	REL Q	-054C 071C	/ 0	
	DECADE	15	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	1.68E 03	
5490A	COUNTER	JB	KVRFPK 14	90C	RADAR	REL Q	-054C 071C	/ 0	
	DECADE	15	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	1.98E 03	
5492A	COUNTER	B-1	KVRFPK 14		RADAR	FIELD Q		/ 0	
	N.R.	26	INORGANIC	72/74	AU	N.A.		5.21E 03	
5492A	COUNTER	B-1	KVRFPK 14		RADAR	FIELD G		/ 0	
	N.R.	26	INORGANIC	74/75	AIU	N.A.		3.86E 03	
5493	COUNTER	A-1	SNFPK 14	46C	COMB/NOC	FIELD U	025C	/ 0	
	BINARY	25	INORGANIC	72/74	SF	N.A.		1.71E 05	
5493	COUNTER	B-1	KVRDIP 14	69C	DISPLAY	REL Q	-054C 055C	/ 0	
	BINARY	25	INORGANIC	74/75	AI	TCVPC	409CY1.4G60X	3.68E 04	
5493	COUNTER	B-1	KVRDIP 14	85C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	BINARY	25	INORGANIC	75/76	AI	TCVPC	178CY1.4G60X	3.20E 04	
5493A	COUNTER	JB	KVRFPK 14	88C	RADAR	CHECK Q	-054C 071C	/ 0	
	BINARY	25	INORGANIC	73/74	AIU	TCVPC	7CY 2.2G 59X	1.02E 03	
5493A	COUNTER	JB	KVRFPK 14	88C	RADAR	REL Q	-054C 071C	/ 0	
	BINARY	25	INORGANIC	74/74	AIU	TCVPC	177CY2.2G59X	1.35E 04	
5493A	COUNTER	JB	KVRFPK 14	88C	RADAR	REL Q	-054C 071C	/ 0	
	BINARY	25	INORGANIC	74/74	AIU	TCVPC	208CY2.2G59X	1.58E 04	
5493A	COUNTER	B-1	KVRFPK 14	42C	DIG PROC	CHECK Q	025C	/ 0	
	BINARY	25	INORGANIC	73/75	AI	EQP OP		1.17E 06	
5493A	COUNTER	B-1	KVRFPK 14	71C	DIG PROC	REL Q	-069C 054C	/ 0	
	BINARY	25	INORGANIC	75/75	AI	TCVPC	14CY .71G62X	2.46E 03	
5493A	COUNTER	B-2	EADIP 14	38C	PROCESS	REL Q	025C	/ 0	
	BINARY	25	INORGANIC	74/74	GBC	EQP OP		6.95E 03	
5495	SHIFT REG	A-1	KVRDIP 14	48C	COMB/NOC	FIELD U	025C	/ 0	
	N.R.	37	INORGANIC	72/74	SF	N.A.		1.56E 04	
5495	SHIFT REG	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0	
	N.R.	37	INORGANIC	72/74	AU	N.A.		2.77E 05	
5495	SHIFT REG	B-1	KVRDIP 14	94C	DIG PROC	REL Q	-054C 071C	/ 0	
	N.R.	37	INORGANIC	74/74	AU	TCVPC	707CY 1G 56X	1.24E 05	
5495	SHIFT REG	B-1	KVRDIP 14	94C	DIG PROC	RELPR Q	-054C 071C	/ 0	
	N.R.	37	INORGANIC	74/75	AU	TCVPC	368CY 1G 56X	6.46E 04	
5495	SHIFT REG	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0	
	N.R.	37	INORGANIC	72/74	AI	N.A.		2.09E 04	

DIGITAL DEVICE DATA

T.I. TTL		:MANUFACTURER :OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCR.N. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS	
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:	
: 5495	: SHIFT REG	: B-1	: KVRDIP 14	: 78C	: DISPLAY	: REL Q	: -054C 055C	: / 0	:	
:	: N.R.	: 37	: INORGANIC	: 74/75	: AI	: TCVPC	: 409CY1.4G60X	: 2.94E 04	:	
: 5495	: SHIFT REG	: B-1	: KVRDIP 14	: 94C	: DISPLAY	: REL Q	: -054C 071C	: / 0	:	
:	: N.R.	: 37	: INORGANIC	: 74/75	: AI	: TCVPC	: 118CY2.2G53X	: 1.06E 04	:	
: 5495	: SHIFT REG	: B-1	: KVRDIP 14	: 94C	: DISPLAY	: RELPR Q	: -054C 071C	: / 0	:	
:	: N.R.	: 37	: INORGANIC	: 75/76	: AI	: TCVPC	: 178CY1.4G60X	: 2.56E 04	:	
: 5495	: SHIFT REG	: B-2	: KVRDIP 14	: 48C	: SONAR	: REL Q	: 025C	: / 1	: I/WIRE BOND	
:	: N.R.	: 37	: INORGANIC	: 74/75	: NSS	: EQP OP	:	: 1.81E 07	:	
: 5495A	: SHIFT REG	: B-1	: KVRFPK 14	: 50C	: DIG PROC	: CHECK Q	: 025C	: / 0	:	
:	: N.R.	: 37	: INORGANIC	: 73/75	: AI	: EQP OP	:	: 2.05E 07	:	
: 5495A	: SHIFT REG	: B-1	: KVRFPK 14	: 79C	: DIG PROC	: REL Q	: -069C 054C	: / 0	:	
:	: N.R.	: 37	: INORGANIC	: 75/75	: AI	: TCVPC	: 14CY .71G62X	: 1.73E 05	:	
: 5495A	: SHIFT REG	: B-1	: KVRFPK 14	: 96C	: DIG PROC	: REL Q	: -054C 071C	: / 0	:	
:	: N.R.	: 37	: INORGANIC	: 74	: AU	: TCVPC	: 178CY1.2G65X	: 1.93E 05	:	
: 5496	: SHIFT REG	: B-1	: KVRDIP 16	:	: DISPLAY	: FIELD Q	:	: / 0	:	
:	: N.R.	: 39	: INORGANIC	: 72/74	: AI	: N.A.	:	: 3.58E 04	:	
: 5496	: SHIFT REG	: B-1	: KVRDIP 16	: 93C	: DISPLAY	: REL Q	: -054C 071C	: / 0	:	
:	: N.R.	: 39	: INORGANIC	: 74/75	: AI	: TCVPC	: 118CY2.2G53X	: 1.81E 04	:	
: 5497	: MULTIPLIER	: B-1	: KVRDIP 16	:	: DISPLAY	: FIELD Q	:	: / 0	:	
:	: BINARY	: 54	: INORGANIC	: 72/74	: AI	: N.A.	:	: 1.79E 04	:	
: 5497	: MULTIPLIER	: B-1	: KVRDIP 16	: 102C	: DISPLAY	: REL Q	: -054C 071C	: / 0	:	
:	: BINARY	: 54	: INORGANIC	: 74/75	: AI	: TCVPC	: 118CY2.2G53X	: 9.06E 03	:	
: 5497	: MULTIPLIER	: B-1	: KVRDIP 16	: 35C	: DISPLAY	: REL G	: 004C 051C	: / 0	:	
:	: BINARY	: 54	: INORGANIC	: 75/75	: GT	: EQP OP	: 18CY 95X	: 5.88E 03	:	
: 54L04	: INVERTER	: A-1	: AUPPK 14	: 27C	: COMB/NOC	: FIELD U	: 025C	: / 0	:	
:	: N.R.	: 6	: INORGANIC	: 73/74	: SF	: N.A.	:	: 1.32E 05	:	
: 7400	: GATE	: NONE	: EADIP 14	: 85C	: NA	: LIFE U	: 085C 85XRH	: 50/ 0	:	
:	: N.R.	: 4	: INORGANIC	: 77/77	: NA	: HUMLIFE	:	: 5.00E 04	:	
:	:	:	:	:	:	:	:	:	:	
:	:	:	:	:	:	: FNCT EM	: 025C	: 50/ 0	:	
:	:	:	:	:	:	:	:	: 0.	:	
: 7400	: GATE	: NONE	: EADIP 14	: 85C	: NA	: LIFE U	: 085C 85XRH	: 50/ 0	:	
:	: N.R.	: 4	: INORGANIC	: 77/77	: NA	: HUMLIFE	:	: 5.00E 04	:	
:	:	:	:	:	:	:	:	:	:	
:	:	:	:	:	:	: FNCT EM	: 025C	: 50/ 0	:	
:	:	:	:	:	:	:	:	: 0.	:	
: 7400	: GATE	: NONE	: EADIP 14	: 85C	: NA	: LIFE U	: 085C 85XRH	: 50/ 0	:	
:	: N.R.	: 4	: INORGANIC	: 77/77	: NA	: HUMLIFE	:	: 5.00E 04	:	
:	:	:	:	:	:	:	:	:	:	
:	:	:	:	:	:	: FNCT EM	: 025C	: 50/ 0	:	
:	:	:	:	:	:	:	:	: 0.	:	

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7400	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0		
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04		
						FNCT EM	025C	50/ 1		
								0.		
7400	GATE	NONE	EADIP 14	29C	INTERFACE	CHECK G	025C	/ 0		
	N.R.	4	INORGANIC	77/77	GBC	EQP OP		1.16E 03		
7402	GATE	NONE	EADIP 14	70C	NA	LIFE U	070C	25/ 0		
	N.R.	4	INORGANIC	72/75	NA	REVBias		2.50E 04		
7403	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	50/ 0		
	N.R.	4	INORGANIC	77/77	NA	HUMLIFE		5.00E 04		
						FNCT EM	025C	50/ 1		
								0.		
7403	GATE	NONE	EADIP 14	89C	NA	LIFE U	085C 85XRH	50/ 0		
	N.R.	4	INORGANIC	77/77	NA	EM		5.00E 04		
						FNCT EM	025C	50/ 0		
								0.		
7404	INVERTER	C-1	KVRDIP 14	75C	SONAR	CHECK Q	070C	/ 0		
	N.R.	6	INORGANIC	72/74	NSS	OP CNST		1.67E 06		
						EQP OP	025C	/ 0		
								1.67E 06		
						EM		/102		
								0.		
7404	INVERTER	NONE	EADIP 14	31C	INTERFACE	CHECK G	025C	/ 0		
	N.R.	6	INORGANIC	77/77	GBC	EQP OP		2.64E 03		
7408	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0		
	N.R.	4	INORGANIC	72/75	NA	RHRB		2.50E 04		
7409	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0		
	N.R.	4	INORGANIC	72/75	NA	RHRB		2.50E 04		
7410	GATE	C-1	KVRDIP 14	73C	SONAR	CHECK Q	070C	/ 0		
	N.R.	3	INORGANIC	72/74	NSS	OP CNST		6.20E 05		
						EQP OP	025C	/ 0		
								6.20E 05		
						EM		/ 51		
								0.		
74123	FLIPFLOP	NONE	EADIP 16	150C	NA	LIFE U	150C	38/ 0		
	MONOSTABLE	20	INORGANIC	72/75	NA	STGLIFE		3.80E 04		
74123	FLIPFLOP	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0		
	MONOSTABLE	20	INORGANIC	72/75	NA	RHRB		2.50E 04		

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7413	GATE	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 0		
	SCHMITT TRIG	2	INORGANIC	72/75	NA	RNRB		2.50E 04		
74151	MULTIPLEXER	C-1	KVRDIP 16	82C	SONAR	CHECK Q	070C	/ 0		
	N.R.	17	INORGANIC	72/74	NSS	OP CNST		1.07E 05		
						EQP OP	025C	/ 0		
								1.07E 05		
						EM		/ 8		
								0.		
74151	MULTIPLEXER	NONE	EADIP 16	150C	NA	LIFE U	150C	76/ 2		
	N.R.	11	INORGANIC	72/75	NA	STGLIFE		7.60E 04		
74151	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	75/ 0		
	N.R.	11	INORGANIC	72/75	NA	RNRB		6.25E 04		
74153	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0		
	N.R.	16	INORGANIC	72/75	NA	RNRB		2.50E 04		
74154	DECODE/DEMUX	NONE	EADIP 24	160C	NA	LIFE U	150C	38/ 0		
	N.R.	25	INORGANIC	72/75	NA	STGLIFE		3.80E 04		
74154	DECODE/DEMUX	NONE	EADIP 24	95C	NA	LIFE U	085C 85XRH	25/ 2		
	N.R.	25	INORGANIC	72/75	NA	RNRB		2.50E 04		
74157	MULTIPLEXER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0		
	N.R.	15	INORGANIC	72/75	NA	RNRB		2.50E 04		
74160	COUNTER	NONE	EADIP 16	150C	NA	LIFE U	150C	38/ 0		
	DECADE	60	INORGANIC	72/75	NA	STGLIFE		3.80E 04		
74160	COUNTER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 1		
	DECADE	60	INORGANIC	72/75	NA	RNRB		2.50E 04		
74161	COUNTER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	38/ 0		
	BINARY	57	INORGANIC	72/75	NA	RNRB		3.80E 04		
74162	ADDER	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0		
	N.R.	60	INORGANIC	72/75	NA	RNRB		2.50E 04		
74163	LATCH	NONE	EADIP 16	150C	NA	LIFE U	150C	38/ 0		
	N.R.	58	INORGANIC	72/75	NA	STGLIFE		3.80E 04		
74163	LATCH	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0		
	N.R.	58	INORGANIC	72/75	NA	RNRB		2.50E 04		
74164	SHIFT REG	NONE	EADIP 14	150C	NA	LIFE U	150C	38/ 0		
	N.R.	36	INORGANIC	72/75	NA	STGLIFE		3.80E 04		
74164	SHIFT REG	NONE	EADIP 14	85C	NA	LIFE U	085C 85XRH	25/ 1		
	N.R.	36	INORGANIC	72/75	NA	RNRB		2.50E 04		
74175	FLIPFLOP	NONE	EADIP 16	85C	NA	LIFE U	085C 85XRH	25/ 0		
	D	24	INORGANIC	72/75	NA	RNRB		2.50E 04		
74180	GENERATOR	NONE	EADIP 14	125C	NA	LIFE U	125C	25/ 0		
	N.R.	14	INORGANIC	72/75	NA	REVBias		1.88E 04		
						RNRB	085C 95XRH	25/ 1		
								6.25E 03		

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
74184	CONVERTER BCD/BINARY	NONE	EADIP 16 :INORGANIC	150C 72/75	NA NA	LIFE U :STGLIFE	150C	38/ 0 : 3.80E 04	
74184	CONVERTER BCD/BINARY	NONE	EADIP 16 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 0 : 2.50E 04	
74185A	CONVERTER BINARY/BCD	NONE	EADIP 16 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 1 : 2.50E 04	
74193	COUNTER BINARY	C-1 48	KVRDIP 16 :INORGANIC	96C 72/74	SONAR :NSS	CHECK Q :OP CNST	070C	/ 0 : 8.55E 04	
						EQP OP	025C	/ 0 : 8.55E 04	
						EM		/ 22 : 0.	
74193	COUNTER BINARY	NONE 48	EADIP 16 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 0 : 2.50E 04	
74194	SHIFT REG N.R.	NONE 47	EADIP 16 :INORGANIC	150C 72/75	NA NA	LIFE U :STGLIFE	150C	38/ 0 : 3.80E 04	
74194	SHIFT REG N.R.	NONE 47	EADIP 16 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 0 : 2.50E 04	
7420	GATE N.R.	NONE 2	EADIP 14 :INORGANIC	70C 72/75	NA NA	LIFE U :REVBias	070C	25/ 0 : 2.50E 04	
7425	GATE N.R.	NONE 2	EADIP 14 :INORGANIC	150C 72/75	NA NA	LIFE U :STGLIFE	150C	38/ 0 : 3.80E 04	
7425	GATE N.R.	NONE 2	EADIP 14 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 0 : 1.25E 04	
7430	GATE N.R.	C-1 1	KVRDIP 14 :INORGANIC	71C 72/74	SONAR :NSS	CHECK Q :OP CNST	070C	/ 0 : 2.57E 05	
						EQP OP	025C	/ 0 : 2.57E 05	
						EM		/ 17 : 0.	
7432	GATE N.R.	NONE 4	EADIP 14 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 2 : 2.50E 04	
7437	BUFFER N.R.	NONE 4	EADIP 14 :INORGANIC	85C 72/75	NA NA	LIFE U :RHRB	085C 85XRH	25/ 1 : 2.50E 04	
7447A	INTERFACE DECODE/DRIVER	NONE	EADIP 16 :INORGANIC	69C 75/77	DISPLAY :GBC	FIELD U :N.A.	040C 55XPWR	/ 6 : 1.26E 07	

DIGITAL DEVICE DATA

T.I. TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7470	FLIPFLOP JK	C-1 11	KVRDIP 14 INORGANIC	76C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 1.28E 05	
						EQP OP	025C	/ 0 1.28E 05	
						EM		/ 3 0.	
7474	FLIPFLOP D	NONE 12	EADIP 14 INORGANIC	85C 77/77	NA NA	LIFE U NUMLIFE	085C 85XRN	50/ 0 5.00E 04	
						FNCT EM	025C	50/ 1 0.	
7476	FLIPFLOP JK	NONE 16	EADIP 16 INORGANIC	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 1.90E 04	
						RHRB	085C 85XRN	25/ 0 1.25E 04	
7483	ADDER FULL	C-1 36	KVRDIP 16 INORGANIC	101C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 3.85E 05	
						EQP OP	025C	/ 0 3.85E 05	
						EM		/ 18 0.	
7483	ADDER BINARY	NONE 36	EADIP 16 INORGANIC	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04	
7485	COMPARATOR N.R.	NONE 31	EADIP 16 INORGANIC	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 1.41E 04	
						RHRB	085C 85XRN	25/ 0 1.58E 04	
7486	GATE N.R.	NONE 4	EADIP 14 INORGANIC	150C 72/75	NA NA	LIFE U STGLIFE	150C	38/ 0 3.80E 04	
7486	GATE N.R.	NONE 4	EADIP 14 INORGANIC	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04	
7492	COUNTER N.R.	C-1 26	KVRDIP 14 INORGANIC	82C 72/74	SONAR NSS	CHECK Q OP CNST	070C	/ 0 2.13E 04	
						EQP OP	025C	/ 0 2.13E 04	
						EM		/ 1 0.	
7492	COUNTER N.R.	NONE 26	EADIP 14 INORGANIC	85C 72/75	NA NA	LIFE U RHRB	085C 85XRN	25/ 0 2.50E 04	
7493	COUNTER BINARY	NONE 25	EADIP 14 INORGANIC	70C 72/75	NA NA	LIFE U REVBias	070C	25/ 1 2.50E 04	
7495	SHIFT REG N.R.	NONE 37	EADIP 14 INORGANIC	70C 72/75	NA NA	LIFE U REVBias	070C	25/ 0 2.50E 04	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
100	GATE	C-1	FPK 14		RADAR	FIELD G		/ 2	2/SHORT
	N.R.	2	N.R.	75/76	AIU	N.A.		5.83E 04	
106	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	4	N.R.	75/76	AIU	N.A.		1.46E 04	
2124	FLIPFLOP	B-1	KVRFPK 14		RADAR	FIELD G		/ 0	
	JK	20	N.R.	74/75	AIU	N.A.		1.16E 05	
2124	FLIPFLOP	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0	
	JK	20	N.R.	72/74	AIU	N.A.		1.25E 05	
2124	FLIPFLOP	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	JK	20	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.76E 03	
5400	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AI	N.A.		1.56E 04	
5400	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		1.93E 05	
5400	GATE	JB	FPK 14		RADAR	FIELD G		/ 2	1/SHORT
	N.R.	4	N.R.	74/75	AIU	N.A.		1.54E 05	OVERSTRESS
5400	GATE	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0	
	N.R.	4	N.R.	74/76	NSS	N.A.		2.88E 07	
5400	GATE	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0	
	N.R.	4	N.R.	74/74	NSS	EQP OP		4.17E 06	
5400	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	4	N.R.	74/74	NSS	VIB FTG	1 AXIS	6.68E 05	
						EQP OP	025C	/ 0	
								2.00E 06	
5400	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	4	N.R.	74/74	NSS	VIB FTG	1 AXIS	3.85E 04	
						EQP OP	025C	/ 0	
								1.15E 05	
5400	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	4	N.R.	75/76	GT	N.A.		5.46E 05	
5400	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0	
	N.R.	4	N.R.	75/75	GT	EQP OP	16CY 95X	8.58E 04	
5400	GATE	JB	DIP 14		PROCESS	FIELD G		/ 0	
	N.R.	4	N.R.	74/75	AU	N.A.		8.54E 03	
5400	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	N.R.	4	N.R.	75/76	GT	N.A.		3.67E 06	
5400	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	4	N.R.	75/75	GT	EQP OP	18CY 95X	3.36E 05	
5400	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	4	N.R.	75/75	GT	EQP OP	24CY 95X	7.97E 04	
5400	GATE	JB	DIP 14	35C	CONTROL	REL Q	025C	/ 0	
	N.R.	4	N.R.	76/76	MGB	EQP OP		5.18E 03	
5400	GATE	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0	
	N.R.	4	N.R.	76/77	MGB	EQP OP		4.46E 04	
5400	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/76	AU	TCVPC	10CY 2.2G 81X	1.08E 04	
5400	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/75	AU	TCVPC	5CY 2.2G 81X	2.16E 03	

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5400	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	1.39E 06	
5400	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	4.04E 05	
5400	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	8.82E 04	
5400	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/76	AU	TCVPC	9CY 2.2G 81X	1.21E 04	
5400	GATE	JB	DIP 14		RADAR	REL Q		/ 0	
	N.R.	4	N.R.	77/77	AU	EQP OP		8.33E 04	
5400	GATE	JB	DIP 14		RECORDER	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		4.27E 04	
5400	GATE	JB	DIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50X	2.47E 04	
5400	GATE	JB	DIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50X	8.33E 03	
5400	GATE	JB	DIP 14	35C	SONAR	FIELD G	025C	/ 0	
	N.R.	4	N.R.	74/76	NSS	N.A.		7.58E 05	
5400	GATE	JB	DIP 14	35C	SONAR	REL Q	025C	/ 0	
	N.R.	4	N.R.	74/74	NSS	EQP OP		1.10E 05	
5400	GATE	JB	DIP 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	4	N.R.	74/74	NSS	VIB FTG	1 AXIS	1.86E 04	
						EQP OP	025C	/ 0	
								5.57E 04	
5400	GATE	B1/JB	FPK 14		PROCESS	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AI	N.A.		3.70E 04	
5400	GATE	B1/JB	FPK 14	81C	PROCESS	RELPR Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	310CY 1G 66X	3.23E 04	
5400	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	76/76	GF	N.A.		5.30E 04	
5400	GATE	B-1	FPK 14		PROCESS	FIELD G		/ 0	
	N.R.	4	N.R.	75/76	AI	N.A.		1.19E 05	
5400	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		5.73E 05	
5400	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0	
	N.R.	4	N.R.	74/76	AU	N.A.		2.95E 06	
5400	GATE	B-1	FPK 14		NAVIGATE	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		1.63E 05	
5400	GATE	B-1	FPK 14		NAVIGATE	FIELD G		/ 0	
	N.R.	4	N.R.	74/76	AU	N.A.		5.87E 05	
5400	GATE	B-1	FPK 14	81C	NAVIGATE	CHECK Q	-054C 071C	/ 0	
	N.R.	4	N.R.	74/74	AU	TCVPC	9CY 1.7G 62X	3.42E 03	
5400	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	74/75	AU	TCVPC	195CY1.7G62X	1.84E 05	
5400	GATE	B-1	FPK 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/76	AU	TCVPC	236CY1.8G60X	8.98E 04	
5400	GATE	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	4	N.R.	75/76	GT	N.A.		1.81E 05	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5400	GATE	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	4	N.R.	75/76	GT	N.A.		4.94E 05		
5400	GATE	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.		4.16E 04		
5400	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	4	N.R.	74/75	AIU	N.A.		8.58E 05		
5400	GATE	B-1	KVRDIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	16CY 95X	9.27E 03		
5400	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	8.86E 04		
5400	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.16E 05		
5400	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AU	N.A.		5.97E 05		
5400	GATE	B-1	KVRDIP 14	81C	DIG PROC	CHECK Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AU	TCVPC	3CY 1G 88X	3.34E 03		
5400	GATE	B-1	KVRDIP 14	81C	DIG PROC	REL Q	-054C 071C	/ 1	1/ OPEN	
	N.R.	4	N.R.	74/74	AU	TCVPC	707CY 1G 56X	2.38E 05		
5400	GATE	B-1	KVRDIP 14	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AU	TCVPC	368CY 1G 56X	1.39E 05		
5400	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AIU	N.A.		3.54E 06		
5400	GATE	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	4	N.R.	74/76	AIU	N.A.		6.99E 05		
5400	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0		
	N.R.	4	N.R.	74/75	AU	N.A.		5.54E 04		
5400	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	2.34E 03		
5400	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	1.09E 04		
5400	GATE	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AI	N.A.		1.46E 05		
5400	GATE	B-1	KVRDIP 14	81C	DISPLAY	CHECK Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AI	TCVPC	4CY 2.2G 62X	1.92E 03		
5400	GATE	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	118CY2.2G53X	7.40E 04		
5400	GATE	B-1	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	18CY 95X	4.54E 04		
5400	GATE	B-1	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	24CY 95X	6.79E 03		
5400	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	4	N.R.	75/76	AIU	N.A.		8.66E 05		
5400	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AIU	N.A.		1.13E 06		
5400	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.00E 04		
5400	GATE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0		
	N.R.	4	N.R.	76/76	GT	EQP OP		4.23E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5400	GATE	N.R.	KVRFPK 14	75/78	RADAR	FIELD Q		/ 0			
	N.R.	4	N.R.		AI	N.A.		5.79E 03			
5400	GATE	N.R.	KVRFPK 14	65C	RADAR	RELPR Q	-054C 055C	/ 0			
	N.R.	4	N.R.	74/75	AI	TCVPC	6CY 2.2G 88X	5.60E 03			
5400	GATE	N.R.	KVRDIP 14	75/78	RADAR	FIELD Q		/ 0			
	N.R.	4	N.R.		AU	N.A.		1.16E 06			
				75/78				/ 3	1/DEGRADED		
								3.10E 05	2/DEGRADED		
5400	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0			
	N.R.	4	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	5.15E 05			
				74/75				/ 3			
								5.82E 05			
5400	GATE	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0			
	N.R.	4	N.R.	75/76	GM	N.A.		8.65E 05			
5400	GATE	NONE	KVRDIP 14	35C	COMMUNIC	REL Q	025C	/ 0			
	N.R.	4	N.R.	74/75	GM	EQP OP		9.33E 03			
5400	GATE	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0			
	N.R.	4	N.R.	75/76	GM	EQP OP		2.68E 05			
5400/5403	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0			
	N.R.	4	N.R.	74/75	AU	N.A.		1.32E 04			
5401	GATE	JB	FPK 14	72/74	RADAR	FIELD Q		/ 0			
	N.R.	4	N.R.		AU	N.A.		5.21E 04			
5401	GATE	JB	FPK 14	74/75	RADAR	FIELD G		/ 0			
	N.R.	4	N.R.		AU	N.A.		3.86E 04			
5401	GATE	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0			
	N.R.	4	N.R.	74/76	NSS	N.A.		1.08E 05			
5401	GATE	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0			
	N.R.	4	N.R.	74/74	NSS	EQP OP		1.57E 04			
5401	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0			
	N.R.	4	N.R.	74/74	NSS	VIB FTG	1 AXIS	2.66E 03			
						EQP OP	025C	/ 0			
								7.96E 03			
5401	GATE	B1/JB	FPK 14		PROCESS	FIELD Q		/ 0			
	N.R.	4	N.R.	72/74	AI	N.A.		4.11E 03			
5401	GATE	B1/JB	FPK 14	81C	PROCESS	RELPR Q	-054C 071C	/ 0			
	N.R.	4	N.R.	75/75	AI	TCVPC	310CY 1G 66X	3.59E 03			
5401	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0			
	N.R.	4	N.R.	76/76	GF	N.A.		3.07E 04			
5401	GATE	B-1	FPK 14	75/76	PROCESS	FIELD G		/ 0			
	N.R.	4	N.R.		AI	N.A.		1.32E 04			
5401	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0			
	N.R.	4	N.R.	72/74	AU	N.A.		1.98E 05			
5401	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0			
	N.R.	4	N.R.	74/76	AU	N.A.		8.00E 05			
5401	GATE	B-1	FPK 14		NAVIGATE	FIELD Q		/ 0			
	N.R.	4	N.R.	72/74	AU	N.A.		3.19E 04			
5401	GATE	B-1	FPK 14		NAVIGATE	FIELD G		/ 0			
	N.R.	4	N.R.	74/76	AU	N.A.		1.92E 05			
5401	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0			
	N.R.	4	N.R.	74/75	AU	TCVPC	195CY1.7G62X	5.32E 04			
5401	GATE	B-1	FPK 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0			
	N.R.	4	N.R.	75/76	AU	TCVPC	236CY1.8G60X	2.60E 04			

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5401	GATE N.R.	B-1 4	FPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 5.62E 03		
5401	GATE N.R.	C-1 4	KVRFPK 14 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 6.36E 03		
5401	GATE N.R.	N.R. 4	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 6.96E 05		
5401	GATE N.R.	N.R. 4	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 1.15E 05		
				74/75				/ 2 2.77E 05		
5402	GATE N.R.	JB 4	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.08E 05		
5402	GATE N.R.	JB 4	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.57E 04		
5402	GATE N.R.	JB 4	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 2.66E 03		
						EQP OP	025C	/ 0 7.96E 03		
5402	GATE N.R.	JB 4	DIP 14 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 2.03E 05		
5402	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 2.43E 04		
5402	GATE N.R.	JB 4	DIP 14 N.R.	74/75	PROCESS AU	FIELD G N.A.		/ 0 1.20E 04		
5402	GATE N.R.	JB 4	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 4.01E 05		
5402	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 9.58E 04		
5402	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 2.94E 04		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G 81X	/ 0 8.00E 03		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 75/75	RADAR AU	REL Q TCVPC	-054C 071C 5CY 2.2G 81X	/ 0 1.60E 03		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 3.73E 05		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 2.95E 05		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 6.40E 04		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 9CY 2.2G 81X	/ 0 8.64E 03		
5402	GATE N.R.	JB 4	DIP 14 N.R.	72/74	RECORDER AU	FIELD Q N.A.		/ 0 5.98E 04		
5402	GATE N.R.	JB 4	DIP 14 N.R.	81C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY 2.2G 50X	/ 0 1.17E 04		
5402	GATE N.R.	B1/JB 4	FPK 14 N.R.	72/74	PROCESS AI	FIELD Q N.A.		/ 0 4.52E 04		
5402	GATE N.R.	B1/JB 4	FPK 14 N.R.	81C 75/75	PROCESS AI	RELPR Q TCVPC	-054C 071C 310CY 1G 66X	/ 0 3.95E 04		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5402	GATE N.R.	B1/JB 4	DIP 14 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 2.43E 04	
5402	GATE N.R.	B-1 4	FPK 14 N.R.	75/76	PROCESS AI	FIELD G N.A.		/ 0 1.45E 05	
5402	GATE N.R.	B-1 4	DIP 14 N.R.	81C 75/76	NAVIGATE AI	RELPR Q TCVPC	-054C 071C 835CY1.6G62X	/ 0 4.14E 05	
5402	GATE N.R.	B-1 4	KVRFPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 7.87E 04	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 6.29E 04	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 9.04E 04	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 2.34E 05	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	81C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 9.54E 04	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	81C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 2 5.47E 04	2/WORKMANSHIP
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 1.43E 06	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.82E 05	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	72/74	NAVIGATE AI	FIELD Q N.A.		/ 0 3.88E 03	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	72/74	DISPLAY AI	FIELD Q N.A.		/ 0 4.47E 04	
5402	GATE N.R.	B-1 4	KVRDIP 14 N.R.	81C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 2.27E 04	
5402	GATE N.R.	C-1 4	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 1.81E 06	
5402	GATE N.R.	C-1 4	KVRFPK 14 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 2.15E 05	
5402	GATE N.R.	C-1 4	KVRFPK 14 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50X	/ 0 9.00E 03	
5402	GATE N.R.	N.R. 4	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 4.40E 04	
5402	GATE N.R.	N.R. 4	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 5.60E 04	
5402	GATE N.R.	NONE 4	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	FIELD G N.A.	025C	/ 0 3.46E 05	
5402	GATE N.R.	NONE 4	KVRDIP 14 N.R.	35C 74/75	COMMUNIC GM	REL Q EQP OP	025C	/ 0 3.73E 03	
5402	GATE N.R.	NONE 4	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	RELPR Q EQP OP	025C	/ 0 1.07E 05	
5403	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 1.62E 04	
5403	GATE N.R.	JB 4	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 3.75E 04	
5403	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 1.26E 04	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5403	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	4	N.R.	75/75	GT	EQP OP	24CY 95X	1.19E 04		
5403	GATE	JB	DIP 14	35C	CONTROL	REL Q	025C	/ 0		
	N.R.	4	N.R.	76/76	MGB	EQP OP		2.30E 03		
5403	GATE	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0		
	N.R.	4	N.R.	76/77	MGB	EQP OP		1.98E 04		
5403	GATE	JB	DIP 14		RADAR	REL Q		/ 0		
	N.R.	4	N.R.	77/77	AIU	EQP OP		1.05E 04		
5403	GATE	B-1	P 14	65C	DISPLAY	REL Q	-054C 055C	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	409CY1.4G60X	1.84E 05		
5403	GATE	B-1	P 14	81C	DISPLAY	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	75/76	AI	TCVPC	178CY1.4G60X	1.60E 05		
5403	GATE	B-1	P 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.		1.92E 03		
5403	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	4.62E 03		
5403	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	6.04E 03		
5403	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0		
	N.R.	4	N.R.	74/75	AU	N.A.		3.69E 04		
5404	INVERTER	JB	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AI	N.A.		1.82E 04		
5404	INVERTER	JB	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AU	N.A.		1.77E 05		
5404	INVERTER	JB	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	6	N.R.	74/75	AIU	N.A.		1.45E 05		
5404	INVERTER	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0		
	N.R.	6	N.R.	74/76	NSS	N.A.		1.02E 07		
5404	INVERTER	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0		
	N.R.	6	N.R.	74/74	NSS	EQP OP		1.48E 06		
5404	INVERTER	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	6	N.R.	74/74	NSS	VIB FTG	1 AXIS	2.50E 05		
						EQP OP	025C	/ 0		
								7.49E 05		
5404	INVERTER	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	6	N.R.	74/74	NSS	VIB FTG	1 AXIS	1.33E 03		
						EQP OP	025C	/ 0		
								3.98E 03		
5404	INVERTER	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.		7.09E 05		
5404	INVERTER	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	6	N.R.	75/75	GT	EQP OP	16CY 95X	9.93E 04		
5404	INVERTER	JB	DIP 14		PROCESS	FIELD G		/ 0		
	N.R.	6	N.R.	74/75	AU	N.A.		2.73E 04		
5404	INVERTER	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.		2.72E 06		
5404	INVERTER	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	N.R.	75/75	GT	EQP OP	18CY 95X	2.25E 05		
5404	INVERTER	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	6	N.R.	75/75	GT	EQP OP	24CY 95X	9.84E 04		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	35C 76/76	CONTROL MGB	REL Q EQP OP	025C	/ 0 1.15E 03	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	35C 76/77	CONTROL MGB	RELPR Q EQP OP	025C	/ 0 9.90E 03	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	81C 76/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 1.00E 05	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	81C 76/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 3.25E 04	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	81C 76/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 8.96E 03	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	81C 76/76	RADAR AU	REL Q TCVPC	-054C 071C 9CY 2.2G 81X	/ 0 2.16E 03	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.		RADAR AIU	REL Q EQP OP		/ 0 1.38E 05	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.		RECORDER AU	FIELD Q N.A.		/ 0 1.37E 05	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	81C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 7.90E 04	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	81C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 2.67E 04	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.84E 06	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 8.66E 05	
5404	INVERTER N.R.	JB 6	DIP 14 N.R.		SONAR NSS	CHECK Q VIB FTC	28HZ 1.3G 1 AXIS	/ 0 4.52E 04	
						EQP OP	025C	/ 0 1.35E 05	
5404	INVERTER N.R.	B1/JB 6	FPK 14 N.R.		PROCESS AI	FIELD Q N.A.		/ 0 3.70E 04	
5404	INVERTER N.R.	B1/JB 6	FPK 14 N.R.	81C 75/75	PROCESS AI	RELPR Q TCVPC	-054C 071C 310CY 1G 66X	/ 0 3.23E 04	
5404	INVERTER N.R.	B1/JB 6	DIP 14 N.R.		RADAR GF	FIELD Q N.A.		/ 0 2.08E 05	
5404	INVERTER N.R.	B-1 6	FPK 14 N.R.		PROCESS AI	FIELD G N.A.		/ 0 1.19E 05	
5404	INVERTER N.R.	B-1 6	FPK 14 N.R.		DIG PROC AU	FIELD Q N.A.		/ 0 4.22E 05	
5404	INVERTER N.R.	B-1 6	FPK 14 N.R.		DIG PROC AU	FIELD G N.A.		/ 0 2.18E 06	
5404	INVERTER N.R.	B-1 6	FPK 14 N.R.		NAVIGATE AU	FIELD Q N.A.		/ 0 5.97E 04	
5404	INVERTER N.R.	B-1 6	FPK 14 N.R.		NAVIGATE AU	FIELD G N.A.		/ 0 3.11E 05	
5404	INVERTER N.R.	B-1 6	FPK 14 N.R.	81C 74/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 195CY1.7G62X	/ 0 5.32E 04	
				74/75				/ 1	1/DEGRADED
								3.39E 04	PROCESS CONT

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
3404	INVERTER	B-1	FPK 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	N.R.	6	N.R.	75/76	AIU	TCVPC	236CY1.8G60X	4.26E 04		
3404	INVERTER	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.		1.50E 05		
3404	INVERTER	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	N.R.	6	N.R.	75/76	AI	TCVPC	835CY1.6G62X	2.76E 05		
3404	INVERTER	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	6	N.R.	75/76	GT	N.A.		6.88E 05		
3404	INVERTER	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	6	N.R.	74/75	AIU	N.A.		7.21E 05		
3404	INVERTER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	9.88E 04		
3404	INVERTER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	6	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.29E 05		
3404	INVERTER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AIU	N.A.		4.48E 05		
3404	INVERTER	B-1	KVRDIP 14	81C	DIG PROC	CHECK Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	3CY 1G 88X	2.46E 03		
3404	INVERTER	B-1	KVRDIP 14	81C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	707CY 1G 56X	1.72E 05		
3404	INVERTER	B-1	KVRDIP 14	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AIU	TCVPC	368CY 1G 56X	1.04E 05		
3404	INVERTER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AIU	N.A.		1.43E 06		
3404	INVERTER	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	6	N.R.	74/76	AIU	N.A.		2.82E 05		
3404	INVERTER	B-1	KVRDIP 14		NAVIGATE	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AI	N.A.		2.58E 03		
3404	INVERTER	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0		
	N.R.	6	N.R.	74/75	AIU	N.A.		6.07E 04		
3404	INVERTER	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	3.51E 03		
3404	INVERTER	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AIU	TCVPC	543CY1.6G62X	1.64E 04		
3404	INVERTER	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	73/74	AIU	TCVPC	62CY 1.6G62X	1.24E 03		
3404	INVERTER	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AI	N.A.		1.13E 05		
3404	INVERTER	B-1	KVRDIP 14	81C	DISPLAY	CHECK Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AI	TCVPC	4CY 2.2G 62X	1.48E 03		
3404	INVERTER	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AI	TCVPC	118CY2.2G53X	5.59E 04		
3404	INVERTER	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/75	AI	TCVPC	119CY2.2G53X	1.51E 03		
3404	INVERTER	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	6	N.R.	75/76	AIU	N.A.		4.66E 06		
3404	INVERTER	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	6	N.R.	72/74	AIU	N.A.		8.62E 05		
3404	INVERTER	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	6	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	3.82E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5404	INVERTER	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0	
	N.R.	6	N.R.	76/76	GT	EQP OP		4.03E 04	
5404	INVERTER	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	75/78	AU	N.A.		2.56E 03	
5404	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	10CY 2.2G 81Z	3.20E 03	
5404	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	6CY 2.2G 81Z	3.58E 04	
				76/77				/ 1	1/SHORT
								9.03E 04	
5404	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/77	AU	TCVPC	7CY 2.2G 81Z	1.21E 05	
5404	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/77	AU	TCVPC	8CY 2.2G 81Z	2.60E 04	
5404	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	9CY 2.2G 81Z	3.67E 03	
5404	INVERTER	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0	
	N.R.	6	N.R.	75/76	GM	N.A.		1.73E 05	
5404	INVERTER	NONE	KVRDIP 14	35C	COMMUNIC	REL Q	025C	/ 0	
	N.R.	6	N.R.	74/75	GM	EQP OP		1.87E 03	
5404	INVERTER	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0	
	N.R.	6	N.R.	75/76	GM	EQP OP		5.36E 04	
5405	INVERTER	B-1	P 14	65C	DISPLAY	REL Q	-054C 055C	/ 0	
	N.R.	6	N.R.	74/75	AI	TCVPC	409CY1.4G60Z	1.47E 04	
5405	INVERTER	B-1	P 14	81C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	N.R.	6	N.R.	75/76	AI	TCVPC	178CY1.4G60Z	1.28E 04	
5405	INVERTER	B-1	FPK 14		NAVIGATE	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	AU	N.A.		7.97E 03	
5405	INVERTER	B-1	FPK 14		NAVIGATE	FIELD G		/ 0	
	N.R.	6	N.R.	74/76	AU	N.A.		3.43E 04	
5405	INVERTER	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	74/75	AU	TCVPC	195CY1.7G62Z	9.67E 03	
5405	INVERTER	B-1	FPK 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0	
	N.R.	6	N.R.	75/76	AU	TCVPC	236CY1.8G60Z	4.73E 03	
5405	INVERTER	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0	
	N.R.	6	N.R.	75/76	AI	TCVPC	835CY1.6G62Z	6.89E 04	
5405	INVERTER	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0	
	N.R.	6	N.R.	76/76	GF	N.A.		6.25E 04	
5405	INVERTER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0	
	N.R.	6	N.R.	72/74	AIU	N.A.		2.26E 05	
5405	INVERTER	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0	
	N.R.	6	N.R.	74/76	AIU	N.A.		4.46E 04	
5405	INVERTER	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0	
	N.R.	6	N.R.	74/75	AU	N.A.		2.64E 03	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5405	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	10CY 2.2G81X	3.60E 03	
5405	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	6CY 2.2G 81X	4.02E 04	
5405	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	7CY 2.2G 81X	1.03E 05	
5405	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/76	AU	TCVPC	8CY 2.2G 81X	2.02E 04	
5405	INVERTER	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	6	N.R.	73/74	AU	TCVPC	9CY 2.2G 81X	1.94E 03	
5405	INVERTER	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0	
	N.R.	6	N.R.	75/76	GM	N.A.		1.73E 05	
5405	INVERTER	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0	
	N.R.	6	N.R.	75/76	GM	EQP OP		5.36E 04	
5408	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0	
	N.R.	4	N.R.	76/76	GF	N.A.		1.57E 04	
5408	GATE	B-1	P 14	65C	DISPLAY	REL Q	-054C 055C	/ 0	
	N.R.	4	N.R.	74/75	AI	TCVPC	409CY1.4G60X	7.36E 03	
5408	GATE	B-1	P 14	81C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/76	AI	TCVPC	178CY1.4G60X	6.41E 03	
5408	GATE	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0	
	N.R.	4	N.R.	74/75	AU	N.A.		1.37E 04	
5408	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.98E 04	
5408	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	5.20E 04	
5408	GATE	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AU	N.A.		6.83E 04	
5408	GATE	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50X	3.95E 04	
5408	GATE	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.33E 04	
5409	GATE	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0	
	N.R.	4	N.R.	76/77	MGB	EQP OP		4.95E 03	
5409	GATE	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0	
	N.R.	4	N.R.	72/74	AI	N.A.		2.98E 03	
5409	GATE	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0	
	N.R.	4	N.R.	74/75	AI	TCVPC	118CY2.2G53X	1.51E 03	
54107	FLIPFLOP	JB	KVRDIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	JK	16	N.R.	75/76	GT	N.A.		1.03E 05	
54107	FLIPFLOP	JB	KVRDIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0	
	JK	16	N.R.	75/75	GT	EQP OP	16CY 95X	1.24E 04	
54107	FLIPFLOP	JB	KVRDIP 14		PROCESS	FIELD G		/ 0	
	JK	16	N.R.	74/75	AU	N.A.		1.71E 03	
54107	FLIPFLOP	JB	KVRDIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	JK	16	N.R.	75/76	GT	N.A.		7.33E 05	
54107	FLIPFLOP	JB	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	JK	16	N.R.	75/75	GT	EQP OP	18CY 95X	5.59E 04	
54107	FLIPFLOP	JB	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	JK	16	N.R.	75/75	GT	EQP OP	24CY 95X	1.81E 04	

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54107	FLIPFLOP	JB	KVRDIP 14			RECORDER	FIELD Q	/ 0	
	JK	16	N.R.	72/74	1AU	N.A.		8.54E 03	
54107	FLIPFLOP	JB	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	JK	16	N.R.	73/74	1AU	TCVPC	411CY2.2G50X	4.94E 03	
54107	FLIPFLOP	JB	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	JK	16	N.R.	75/76	1AU	TCVPC	139CY2.2G50X	1.67E 03	
54107	FLIPFLOP	B-1	DIP 14	65C	DISPLAY	REL Q	-054C 055C	/ 0	
	JK	16	N.R.	74/75	1AI	TCVPC	409CY1.4G60X	3.68E 04	
54107	FLIPFLOP	B-1	DIP 14	81C	DISPLAY	RELPR Q	-054C 071C	/ 0	
	JK	16	N.R.	75/76	1AI	TCVPC	178CY1.4G60X	3.20E 04	
54107	FLIPFLOP	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0	
	JK	16	N.R.	72/74	1AIU	N.A.		1.51E 05	
54107	FLIPFLOP	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0	
	JK	16	N.R.	74/76	1AIU	N.A.		2.97E 04	
54107	FLIPFLOP	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0	
	JK	16	N.R.	72/74	1AI	N.A.		5.07E 04	
54107	FLIPFLOP	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0	
	JK	16	N.R.	74/75	1AI	TCVPC	118CY2.2G53X	2.57E 04	
54107	FLIPFLOP	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0	
	JK	16	N.R.	76/76	1GT	EQP OP		9.41E 04	
5410	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	3	N.R.	72/74	1AU	N.A.		1.20E 05	
5410	GATE	JB	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	3	N.R.	74/75	1AIU	N.A.		8.87E 04	
5410	GATE	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0	
	N.R.	3	N.R.	74/76	1NSS	N.A.		1.09E 07	
5410	GATE	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0	
	N.R.	3	N.R.	74/74	1NSS	EQP OP		1.57E 06	
5410	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	3	N.R.	74/74	1NSS	VIB FTG	1 AXIS	2.66E 05	
						EQP OP	025C	/ 0	
								7.96E 05	
5410	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	3	N.R.	74/74	1NSS	VIB FTG	1 AXIS	1.33E 03	
						EQP OP	025C	/ 0	
								3.98E 03	
5410	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	3	N.R.	75/76	1GT	N.A.		1.49E 05	
5410	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0	
	N.R.	3	N.R.	75/75	1GT	EQP OP	16CY 95X	2.67E 04	
5410	GATE	JB	DIP 14		PROCESS	FIELD G		/ 0	
	N.R.	3	N.R.	74/75	1AU	N.A.		1.02E 04	
5410	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	N.R.	3	N.R.	75/76	1GT	N.A.		9.72E 05	
5410	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	3	N.R.	75/75	1GT	EQP OP	18CY 95X	7.14E 04	
5410	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	3	N.R.	75/75	1GT	EQP OP	24CY 95X	2.49E 04	
5410	GATE	JB	DIP 14	35C	CONTROL	REL Q	025C	/ 0	
	N.R.	3	N.R.	76/76	1MGB	EQP OP		1.15E 03	

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5410	GATE	JB	DIP 14	33C	CONTROL	RELPR Q	025C	/ 0		
	N.R.	3	N.R.	76/77	MGB	EQP OP		9.90E 03		
5410	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	73/76	AU	TCVPC	10CY 2.2G 81X	8.80E 03		
5410	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	75/75	AU	TCVPC	5CY 2.2G 81X	1.76E 03		
5410	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	3.70E 05		
				76/76				/ 2	2/DEGRADED OVERSTRESS	
								2.31E 05		
5410	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	3.27E 05		
5410	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	7.13E 04		
5410	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	73/76	AU	TCVPC	9CY 2.2G 81X	9.72E 03		
5410	GATE	JB	DIP 14		RADAR	REL Q		/ 0		
	N.R.	3	N.R.	77/77	AU	EQP OP		2.45E 04		
5410	GATE	JB	DIP 14		RECORDER	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AU	N.A.		5.12E 04		
5410	GATE	JB	DIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	73/74	AU	TCVPC	411CY 2.2G 50X	2.96E 04		
5410	GATE	JB	DIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	3	N.R.	75/76	AU	TCVPC	139CY 2.2G 50X	1.00E 04		
5410	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	3	N.R.	76/76	GF	N.A.		1.50E 04		
5410	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AU	N.A.		2.45E 05		
5410	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	N.R.	3	N.R.	74/76	AU	N.A.		1.27E 06		
5410	GATE	B-1	FPK 14		NAVIGATE	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AU	N.A.		7.97E 04		
5410	GATE	B-1	FPK 14		NAVIGATE	FIELD G		/ 0		
	N.R.	3	N.R.	74/76	AU	N.A.		4.08E 05		
5410	GATE	B-1	FPK 14	81C	NAVIGATE	CHECK Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/74	AU	TCVPC	9CY 1.7G 62X	1.35E 03		
5410	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/75	AU	TCVPC	195CY 1.7G 62X	1.11E 05		
5410	GATE	B-1	FPK 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	N.R.	3	N.R.	75/76	AU	TCVPC	236CY 1.8G 60X	5.44E 04		
5410	GATE	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	N.R.	3	N.R.	75/76	AI	TCVPC	835CY 1.6G 62X	1.38E 05		
5410	GATE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0		
	N.R.	3	N.R.	74/75	AU	N.A.		4.65E 05		
5410	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AU	N.A.		2.34E 05		
5410	GATE	B-1	KVRDIP 14	81C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/74	AU	TCVPC	707CY 1G 56X	9.54E 04		
5410	GATE	B-1	KVRDIP 14	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/75	AU	TCVPC	368CY 1G 56X	5.47E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5410	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AIU	N.A.		2.19E 06		
5410	GATE	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	3	N.R.	74/76	AIU	N.A.		4.31E 05		
5410	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AI	N.A.		1.29E 03		
5410	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0		
	N.R.	3	N.R.	74/75	AU	N.A.		5.01E 04		
5410	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
5410	GATE	B-1	KVRDIP 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		
5410	GATE	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AI	N.A.		9.26E 04		
5410	GATE	B-1	KVRDIP 14	81C	DISPLAY	CHECK Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/74	AI	TCVPC	4CY 2.2G 62X	1.20E 03		
5410	GATE	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/75	AI	TCVPC	118CY2.2G53X	4.68E 04		
5410	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	3	N.R.	75/76	AIU	N.A.		2.50E 06		
5410	GATE	C-1	KVRFPK 14		RADAR	FIELD Q		/ 0		
	N.R.	3	N.R.	72/74	AIU	N.A.		5.48E 05		
5410	GATE	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	3	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	2.40E 04		
5410	GATE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0		
	N.R.	3	N.R.	76/76	GT	EQP OP		2.02E 03		
5410	GATE	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	3	N.R.	75/78	AU	N.A.		3.77E 05		
5410	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 053C	/ 0		
	N.R.	3	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	2.86E 05		
5410	GATE	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0		
	N.R.	3	N.R.	75/76	GM	N.A.		3.46E 05		
5410	GATE	NONE	KVRDIP 14	35C	COMMUNIC	REL Q	025C	/ 0		
	N.R.	3	N.R.	74/75	GM	EQP OP		3.73E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5410	GATE	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0			
	N.R.	3	N.R.	75/76	GM	EQP OP		1.07E 05			
5410/5440	GATE	B-1	KVRDIP 14		NAVIGATE	FIELD G		/ 0			
	N.R.		N.R.	74/75	AU	N.A.		2.64E 03			
5411	GATE	B-1	KVRDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	3	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.96E 03			
5411	GATE	B-1	KVRDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	3	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.56E 03			
54121	FLIPFLOP MONOSTABLE	JB 8	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.08E 05			
54121	FLIPFLOP MONOSTABLE	JB 8	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.57E 04			
54121	FLIPFLOP MONOSTABLE	JB 8	FPK 14 N.R.		SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 2.66E 03			
						EQP OP	025C	/ 0 7.96E 03			
54121	FLIPFLOP MONOSTABLE	JB 8	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 5.51E 04			
54121	FLIPFLOP MONOSTABLE	JB 8	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 2.94E 03			
54121	FLIPFLOP MONOSTABLE	JB 8	DIP 14 N.R.		RADAR AIU	REL Q EQP OP		/ 0 1.08E 04			
54121	FLIPFLOP MONOSTABLE	B1/JB 8	DIP 14 N.R.		RADAR GF	FIELD Q N.A.		/ 0 3.36E 05			
54121	FLIPFLOP MONOSTABLE	B-1 8	FPK 14 N.R.		DIG PROC AU	FIELD Q N.A.		/ 1 1.72E 04	1/ OPEN WORKMANSHIP		
54121	FLIPFLOP MONOSTABLE	B-1 8	FPK 14 N.R.		DIG PROC AU	FIELD G N.A.		/ 0 8.88E 04			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 5.72E 03			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.01E 04			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.		DIG PROC AIU	FIELD Q N.A.		/ 0 1.51E 05			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.		DIG PROC AIU	FIELD G N.A.		/ 0 2.97E 04			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.		NAVIGATE AU	FIELD G N.A.		/ 0 1.58E 04			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.		DISPLAY AI	FIELD Q N.A.		/ 0 1.79E 04			
54121	FLIPFLOP MONOSTABLE	B-1 8	KVRDIP 14 N.R.	81C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 9.06E 03			
54122	FLIPFLOP MONOSTABLE	B1/JB 10	DIP 14 N.R.		RADAR GF	FIELD Q N.A.		/ 0 7.03E 03			
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 1.47E 05			
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 2.70E 04			

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	74/75	PROCESS AU	FIELD G N.A.		/ 0 8.54E 03		
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 1.45E 04		
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY	/ 0 7.35E 03		
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	72/74	RECORDER AU	FIELD Q N.A.		/ 0 4.27E 04		
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	81C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 5.92E 04		
54123	FLIPFLOP MONOSTABLE	JB 20	KVRDIP 16 N.R.	81C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 8.33E 03		
54123	FLIPFLOP MONOSTABLE	B-1 20	DIP 16 N.R.	72/74	PROCESS AI	FIELD Q N.A.		/ 0 1.23E 04		
54123	FLIPFLOP MONOSTABLE	B-1 20	DIP 16 N.R.	75/76	PROCESS AI	FIELD G N.A.		/ 0 3.96E 04		
54123	FLIPFLOP MONOSTABLE	B-1 20	DIP 16 N.R.	81C 75/75	PROCESS AI	RELPR Q TCVPC	-054C 071C 310CY 1G 66X	/ 0 1.08E 04		
54123	FLIPFLOP MONOSTABLE	B-1 20	KVRDIP 16 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.26E 03		
54123	FLIPFLOP MONOSTABLE	B-1 20	KVRDIP 16 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.65E 03		
54123	FLIPFLOP MONOSTABLE	C-1 20	KVRDIP 16 N.R.	30C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 1.26E 05		
5413	GATE SCHMITT TRIG	B-1 2	KVRDIP 14 N.R.	75/76	DIG PROC AIU	FIELD G N.A.		/ 0 1.22E 04		
5414	INVERTER SCHMITT TRIG	JB 6	DIP 14 N.R.	35C 76/76	CONTROL MGB	REL Q EQP OP	025C	/ 0 2.59E 03		
5414	INVERTER SCHMITT TRIG	JB 6	DIP 14 N.R.	35C 76/77	CONTROL MGB	RELPR Q EQP OP	025C	/ 0 2.23E 04		
54150	MULTIPLEXER N.R.	JB 26	FPK 24 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 2.93E 04		
54150	MULTIPLEXER N.R.	JB 26	FPK 24 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY	/ 0 4.64E 03		
54150	MULTIPLEXER N.R.	JB 26	FPK 24 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 7.26E 03		
54150	MULTIPLEXER N.R.	JB 26	FPK 24 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY	/ 0 5.88E 03		
54150	MULTIPLEXER N.R.	JB 26	FPK 24 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY	/ 0 5.66E 03		
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 N.R.	35C 73/77	COMMUNIC GF	FIELD G N.A.	025C	/ 0 6.91E 06		
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.62E 04		
54151	MULTIPLEXER N.R.	B-1 17	KVRDIP 16 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3 62X	/ 0 2.12E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54151	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
	N.R.	17	N.R.	72/74	AU	N.A.		2.13E 05		
54151	MULTIPLEXER	B-1	KVRDIP 16	81C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	17	N.R.	74/74	AU	TCVPC	707CY 1G 56X	9.54E 04		
54151	MULTIPLEXER	B-1	KVRDIP 16	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	N.R.	17	N.R.	74/75	AU	TCVPC	368CY 1G 56X	4.97E 04		
54151	MULTIPLEXER	C-1	KVRDIP 16	30C	RADAR	REL Q	020C	/ 0		
	N.R.	17	N.R.	76/76	GT	EQP OP		2.31E 05		
54153	MULTIPLEXER	B1/JB	DIP 16		RADAR	FIELD Q		/ 0		
	N.R.	16	N.R.	76/76	GF	N.A.		1.79E 05		
54153	MULTIPLEXER	B-1	DIP 16	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	16	N.R.	75/76	GT	N.A.		1.32E 05		
54153	MULTIPLEXER	B-1	DIP 16	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	16	N.R.	75/76	GT	N.A.		2.49E 05		
54153	MULTIPLEXER	B-1	KVRDIP 16	35C	COMMUNIC	FIELD G	025C	/ 0		
	N.R.	16	N.R.	73/77	GF	N.A.		7.51E 06		
54153	MULTIPLEXER	B-1	KVRDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	16	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	7.18E 04		
54153	MULTIPLEXER	B-1	KVRDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	16	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	9.39E 04		
54153	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
	N.R.	16	N.R.	72/74	AU	N.A.		1.49E 05		
54153	MULTIPLEXER	B-1	KVRDIP 16	81C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	16	N.R.	74/74	AU	TCVPC	707CY 1G 56X	8.58E 04		
54153	MULTIPLEXER	B-1	KVRDIP 16	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	N.R.	16	N.R.	74/75	AU	TCVPC	368CY 1G 56X	3.48E 04		
54153	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD G		/ 0		
	N.R.	16	N.R.	75/76	AU	N.A.		7.31E 04		
54153	MULTIPLEXER	C-1	KVRDIP 16	30C	RADAR	REL Q	020C	/ 0		
	N.R.	16	N.R.	76/76	GT	EQP OP		2.98E 05		
54154	DECODE/DEMUX	B-1	KVRDIP 24		DIG PROC	FIELD G		/ 0		
	N.R.	25	N.R.	75/76	AU	N.A.		1.22E 04		
54154	DECODE/DEMUX	C-1	KVRDIP 24	30C	RADAR	REL Q	020C	/ 0		
	N.R.	25	N.R.	76/76	GT	EQP OP		4.50E 04		
54155	DECODE/DEMUX	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
	N.R.	15	N.R.	72/74	AU	N.A.		2.13E 04		
54155	DECODE/DEMUX	B-1	KVRDIP 16	81C	DIG PROC	REL Q	-054C 071C	/ 0		
	N.R.	15	N.R.	74/74	AU	TCVPC	707CY 1G 56X	1.91E 04		
54155	DECODE/DEMUX	B-1	KVRDIP 16	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	N.R.	15	N.R.	74/75	AU	TCVPC	368CY 1G 56X	4.97E 03		
54155	DECODE/DEMUX	B-1	KVRDIP 16		RADAR	FIELD G		/ 0		
	N.R.	15	N.R.	74/75	AU	N.A.		1.50E 04		
54155	DECODE/DEMUX	C-1	KVRDIP 16		RADAR	FIELD Q		/ 0		
	N.R.	15	N.R.	72/74	AU	N.A.		5.09E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54155	DECODE/DEMUX N.R.	C-1 15	KVRDIP 16 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50X	/ 0 2.16E 03	
54155	DECODE/DEMUX N.R.	C-1 15	KVRDIP 16 N.R.	30C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 1.41E 04	
54157	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 5.17E 04	
54157	MULTIPLEXER N.R.	B-1 15	KVRDIP 16 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 6.75E 04	
54157	MULTIPLEXER N.R.	B-1 19	KVRFPK 16 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 6.77E 04	
54157	MULTIPLEXER N.R.	B-1 19	KVRFPK 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 5.01E 04	
54157	MULTIPLEXER N.R.	C-1 15	KVRDIP 16 N.R.	30C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 4.55E 05	
54160	COUNTER DECADE	B1/JB 60	DIP 16 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 1.28E 03	
54161	COUNTER BINARY	JB 57	DIP 16 N.R.	50C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 1.76E 05	
54161	COUNTER BINARY	JB 57	DIP 16 N.R.	29C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 9.27E 03	
54161	COUNTER BINARY	JB 57	DIP 16 N.R.	50C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 4.36E 04	
54161	COUNTER BINARY	JB 57	DIP 16 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 6.79E 03	
54161	COUNTER BINARY	JB 57	DIP 16 N.R.	50C 76/76	CONTROL MGB	REL Q EQP OP	025C	/ 0 3.17E 03	
54161	COUNTER BINARY	JB 57	DIP 16 N.R.	50C 76/77	CONTROL MGB	RELPR Q EQP OP	025C	/ 0 2.72E 04	
54161	COUNTER BINARY	B1/JB 57	DIP 16 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 5.85E 04	
54161	COUNTER BINARY	B-1 57	FPK 16 N.R.	72/74	NAVIGATE AU	FIELD Q N.A.		/ 0 3.98E 04	
54161	COUNTER BINARY	B-1 57	FPK 16 N.R.	74/76	NAVIGATE AU	FIELD G N.A.		/ 0 1.77E 05	
54161	COUNTER BINARY	B-1 57	FPK 16 N.R.	96C 74/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 195CY1.7G62X	/ 0 4.84E 04	
54161	COUNTER BINARY	B-1 57	FPK 16 N.R.	96C 75/76	NAVIGATE AU	RELPR Q TCVPC	-054C 071C 236CY1.8G60X	/ 0 2.36E 04	
54161	COUNTER BINARY	B-1 57	DIP 16 N.R.	55C 76/76	RADAR GF	FIELD G N.A.	030C	/ 0 4.85E 06	
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 4.26E 04	
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	96C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 9.54E 03	
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	96C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 9.95E 03	
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	72/74	RADAR AI	FIELD Q N.A.		/ 0 7.81E 03	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 1.04E 04		
54161	COUNTER BINARY	B-1 57	KVRDIP 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.35E 04		
54161	COUNTER BINARY	C-1 57	KVRDIP 16 N.R.	45C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 1.54E 05		
54163	COUNTER BINARY	B1/JB 58	DIP 16 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 6.07E 03		
54163	COUNTER BINARY	B-1 58	KVRFPK 16 N.R.	50C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.08E 05		
54163	COUNTER BINARY	B-1 58	KVRFPK 16 N.R.	50C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.57E 04		
54163	COUNTER BINARY	B-1 58	KVRFPK 16 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 2.66E 03		
						EQP OP	025C	/ 0 7.96E 03		
54164	SHIFT REG N.R.	JB 36	DIP 14 N.R.	74/75	PROCESS AU	FIELD G N.A.		/ 0 1.20E 04		
54164	SHIFT REG N.R.	JB 36	DIP 14 N.R.	50C 76/77	CONTROL MGB	RELPR Q EQP OP	025C	/ 0 4.95E 03		
54164	SHIFT REG N.R.	JB 36	DIP 14 N.R.	72/74	RECORDER AU	FIELD Q N.A.		/ 0 5.98E 04		
54164	SHIFT REG N.R.	JB 36	DIP 14 N.R.	96C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY2.2G50X	/ 0 3.46E 04		
54164	SHIFT REG N.R.	JB 36	DIP 14 N.R.	96C 75/76	RECORDER AU	RELPR Q TCVPC	-054C 071C 139CY2.2G50X	/ 0 1.17E 04		
54164	SHIFT REG N.R.	B1/JB 36	DIP 14 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 7.99E 03		
54164	SHIFT REG N.R.	B-1 36	KVRDIP 16 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 1.70E 05		
54164	SHIFT REG N.R.	B-1 36	KVRDIP 16 N.R.	96C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 7.63E 04		
54164	SHIFT REG N.R.	B-1 36	KVRDIP 16 N.R.	96C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 3.98E 04		
54164	SHIFT REG N.R.	B-1 36	KVRDIP 16 N.R.	75/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.44E 04		
54164	SHIFT REG N.R.	C-1 36	KVRDIP 16 N.R.	45C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 7.39E 04		
54165	SHIFT REG N.R.	JB 62	KVRDIP 16 N.R.	50C 73/77	COMMUNIC GF	FIELD G N.A.	025C	/ 0 3.53E 06		
54165	SHIFT REG N.R.	B1/JB 62	DIP 16 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 3.83E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54165	SHIFT REG N.R.	B-1 62	KVRDIP 16 N.R.	50C 75/77	COMMUNIC GF	FIELD G N.A.	025C	/ 0 3.58E 06		
54165	SHIFT REG N.R.	B-1 62	KVRDIP 16 N.R.	75/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.44E 04		
54166	SHIFT REG N.R.	B-1 100	KVRDIP 16 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 8.52E 04		
54166	SHIFT REG N.R.	B-1 100	KVRDIP 16 N.R.	96C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 3.81E 04		
54166	SHIFT REG N.R.	B-1 100	KVRDIP 16 N.R.	96C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 1.99E 04		
54174	FLIPFLOP D	B1/JB 36	DIP 16 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 3.20E 03		
54174	FLIPFLOP D	B-1 36	KVRDIP 16 N.R.	75C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 7.90E 04		
54174	FLIPFLOP D	B-1 36	KVRDIP 16 N.R.	75C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.03E 05		
54174	FLIPFLOP D	B-1 36	KVRDIP 16 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 2.13E 04		
54174	FLIPFLOP D	B-1 36	KVRDIP 16 N.R.	96C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 9.54E 03		
54174	FLIPFLOP D	B-1 36	KVRDIP 16 N.R.	96C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 4.97E 03		
54175	FLIPFLOP D	B1/JB 24	DIP 16 N.R.	76/76	RADAR GF	FIELD Q N.A.		/ 0 1.27E 05		
54175	FLIPFLOP D	B-1 24	DIP 16 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 6.02E 04		
54175	FLIPFLOP D	B-1 24	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 2.75E 05		
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	35C 73/77	COMMUNIC GF	FIELD G N.A.	025C	/ 0 1.64E 07		
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 2.13E 04		
54175	FLIPFLOP D	B-1 24	KVRDIP 16 N.R.	81C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 4.97E 03		
54176	COUNTER DECADE	B-1 39	KVRDIP 14 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 1.28E 05		
54176	COUNTER DECADE	B-1 39	KVRDIP 14 N.R.	96C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 5.72E 04		
54176	COUNTER DECADE	B-1 39	KVRDIP 14 N.R.	96C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 2.98E 04		
54177	COUNTER BINARY	B-1 34	KVRDIP 14 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 3.41E 05		
54177	COUNTER BINARY	B-1 34	KVRDIP 14 N.R.	96C 74/74	DIG PROC AU	CHECK Q TCVPC	-054C 071C 3CY 1G 88X	/ 0 1.01E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
54177	COUNTER	B-1	KVRDIP 14	96C	DIG PROC	REL Q	-054C 071C	/ 0			
	BINARY	34	N.R.	74/74	AU	TCVPC	707CY 1G 56X	1.43E 05			
54177	COUNTER	B-1	KVRDIP 14	96C	DIG PROC	RELPR Q	-054C 071C	/ 0			
	BINARY	34	N.R.	74/75	AU	TCVPC	368CY 1G 56X	7.96E 04			
5417	INTERFACE	JB	KVRDIP 14		PROCESS	FIELD G		/ 0			
	BUFFER/DRIVER	6	N.R.	74/75	AU	N.A.		1.71E 03			
5417	INTERFACE	JB	KVRDIP 14		RECORDER	FIELD Q		/ 0			
	BUFFER/DRIVER	6	N.R.	72/74	AU	N.A.		8.54E 03			
5417	INTERFACE	JB	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0			
	BUFFER/DRIVER	6	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03			
5417	INTERFACE	JB	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0			
	BUFFER/DRIVER	6	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03			
5417	INTERFACE	B1/JB	KVRDIP 14	65C	COMMUNIC	CHECK Q	-054C 055C	/ 0			
	BUFFER/DRIVER	6	N.R.	75/76	AI	TCVPC	14CY 2.2G70X	4.05E 04			
5417	INTERFACE	B1/JB	KVRDIP 14	65C	COMMUNIC	REL Q	-054C 055C	/ 0			
	BUFFER/DRIVER	6	N.R.	75/75	AI	TCVPC	140CY2.2G70X	1.41E 04			
5417	INTERFACE	B1/JB	KVRDIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0			
	BUFFER/DRIVER	6	N.R.	74/75	AI	TCVPC	16CY2.2G 70X	1.99E 04			
5417	INTERFACE	B1/JB	KVRDIP 14	65C	COMMUNIC	RELPR Q	-054C 055C	/ 0			
	BUFFER/DRIVER	6	N.R.	75/76	AI	TCVPC	16CY 2.2G70X	6.35E 03			
5417	INTERFACE	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0			
	BUFFER/DRIVER	6	N.R.	74/75	AU	N.A.		1.71E 03			
5417	INTERFACE	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0			
	BUFFER/DRIVER	6	N.R.	72/74	AU	N.A.		8.54E 03			
5417	INTERFACE	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0			
	BUFFER/DRIVER	6	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03			
5417	INTERFACE	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0			
	BUFFER/DRIVER	6	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03			
5417	INTERFACE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0			
	BUFFER/DRIVER	6	N.R.	76/76	GT	EQP OP		1.33E 05			
54180	GENERATOR	B-1	P 0	65C	DISPLAY	REL Q	-054C 055C	/ 0			
	N.R.	14	N.R.	74/75	AI	TCVPC	409CY1.4G60X	2.94E 04			
54180	GENERATOR	B-1	P 0	81C	DISPLAY	RELPR Q	-054C 071C	/ 0			
	N.R.	14	N.R.	75/76	AI	TCVPC	178CY1.4G60X	2.56E 04			
54180	GENERATOR	B-1	P 14	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	14	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.96E 04			
54180	GENERATOR	B-1	P 14	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	14	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	5.18E 04			

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54180	GENERATOR	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	14	N.R.	75/76	GT	N.A.		2.05E 05	
54180	GENERATOR	B-1	DIP 14		NAVIGATE	FIELD G		/ 0	
	N.R.	14	N.R.	75/76	AI	N.A.		3.88E 03	
54180	GENERATOR	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0	
	N.R.	14	N.R.	75/76	AI	TCVPC	835CY1.6G62Z	6.89E 04	
54180	GENERATOR	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	N.R.	14	N.R.	75/76	GT	N.A.		6.90E 05	
54180	GENERATOR	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0	
	N.R.	14	N.R.	74/75	AU	N.A.		3.42E 03	
54180	GENERATOR	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0	
	N.R.	14	N.R.	72/74	AU	N.A.		3.42E 04	
54180	GENERATOR	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	14	N.R.	73/74	AU	TCVPC	411CY2.2G50Z	9.87E 03	
54180	GENERATOR	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	14	N.R.	75/76	AU	TCVPC	139CY2.2G50Z	3.33E 03	
54180	GENERATOR	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0	
	N.R.	14	N.R.	76/76	GT	EQP OP		1.57E 05	
54181	LOGIC UNIT	B-1	FPK 24		DIG PROC	FIELD Q		/ 0	
	ARITHMETIC	63	N.R.	72/74	AU	N.A.		3.44E 04	
54181	LOGIC UNIT	B-1	FPK 24		DIG PROC	FIELD G		/ 0	
	ARITHMETIC	63	N.R.	74/76	AU	N.A.		1.78E 05	
54181	LOGIC UNIT	B-1	KVRFPK 24		RADAR	FIELD G		/ 1	1/CATASTROPHIC
	ARITHMETIC	63	N.R.	74/75	AIU	N.A.		2.02E 05	
54181	LOGIC UNIT	C-1	FPK 24		RADAR	FIELD G		/ 0	
	ARITHMETIC	63	N.R.	75/76	AIU	N.A.		2.04E 06	
54181	LOGIC UNIT	C-1	KVRFPK 24		RADAR	FIELD Q		/ 0	
	ARITHMETIC	63	N.R.	72/74	AIU	N.A.		2.28E 05	
54181	LOGIC UNIT	C-1	KVRFPK 24	96C	RADAR	REL Q	-054C 071C	/ 0	
	ARITHMETIC	63	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50Z	1.05E 04	
54182	GENERATOR	JB	KVRDIP 16	35C	COMMUNIC	FIELD G	025C	/ 0	
	N.R.	19	N.R.	73/77	GF	N.A.		2.57E 06	
54182	GENERATOR	B-1	P 16	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	19	N.R.	75/75	AI	TCVPC	13CY1.3G 62Z	1.82E 03	
54182	GENERATOR	B-1	P 16	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	19	N.R.	75/75	AI	TCVPC	17CY1.3G 62Z	2.38E 03	
54182	GENERATOR	B-1	FPK 16		DIG PROC	FIELD Q		/ 0	
	N.R.	19	N.R.	72/74	AU	N.A.		8.61E 03	
54182	GENERATOR	B-1	FPK 16		DIG PROC	FIELD G		/ 0	
	N.R.	19	N.R.	74/76	AU	N.A.		4.44E 04	
54191	COUNTER	B-1	DIP 16	50C	DISPLAY	FIELD Q	025C	/ 0	
	BINARY	60	N.R.	75/76	GT	N.A.		1.85E 05	
54191	COUNTER	B-1	KVRDIP 16	50C	COMMUNIC	FIELD G	025C	/ 0	
	BINARY	60	N.R.	73/77	GF	N.A.		1.12E 06	
54191	COUNTER	B-1	KVRDIP 16		DISPLAY	FIELD Q		/ 0	
	BINARY	60	N.R.	72/74	AI	N.A.		6.66E 04	
54191	COUNTER	B-1	KVRDIP 16	96C	DISPLAY	REL Q	-054C 071C	/ 0	
	BINARY	60	N.R.	74/75	AI	TCVPC	118CY2.2G53Z	3.47E 04	
54191	COUNTER	C-1	KVRDIP 16	45C	RADAR	REL Q	020C	/ 0	
	BINARY	60	N.R.	76/76	GT	EQP OP		7.86E 04	
54192	COUNTER		KVRDIP 16	50C	COMMUNIC	FIELD G	025C	/ 0	
	BCD	50	N.R.	75/76	GM	N.A.		5.19E 05	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
54192	COUNTER	NONE	KVRDIP 16	50C	COMMUNIC	REL Q	025C	/ 0			
	BCD	50	N.R.	74/75	GM	EQP OP		5.60E 03			
54192	COUNTER	NONE	KVRDIP 16	50C	COMMUNIC	RELPR Q	025C	/ 0			
	BCD	50	N.R.	75/76	GM	EQP OP		1.61E 05			
54193	COUNTER	JB	DIP 16	29C	COMMUNIC	REL G	004C 051C	/ 0			
	BINARY	48	N.R.	75/75	GT	EQP OP	16CY 95X	1.55E 03			
54193	COUNTER	JB	DIP 16	29C	DISPLAY	REL G	004C 051C	/ 0			
	BINARY	48	N.R.	75/75	GT	EQP OP	24CY 95X	1.13E 03			
54193	COUNTER	JB	DIP 16	50C	CONTROL	RELPR Q	025C	/ 0			
	BINARY	48	N.R.	76/77	MGB	EQP OP		7.43E 03			
54193	COUNTER	B1/JB	DIP 16		RADAR	FIELD Q		/ 0			
	BINARY	48	N.R.	76/76	GF	N.A.		1.28E 03			
54193	COUNTER	B-1	FPK 16		DIG PROC	FIELD Q		/ 0			
	BINARY	48	N.R.	72/74	AU	N.A.		8.18E 04			
54193	COUNTER	B-1	FPK 16		DIG PROC	FIELD G		/ 0			
	BINARY	48	N.R.	74/76	AU	N.A.		4.22E 05			
54193	COUNTER	B-1	KVRDIP 16		PROCESS	FIELD G		/ 0			
	BINARY	48	N.R.	74/75	AU	N.A.		1.71E 03			
54193	COUNTER	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0			
	BINARY	48	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	2.01E 03			
54193	COUNTER	B-1	KVRDIP 16		RECORDER	FIELD Q		/ 0			
	BINARY	48	N.R.	72/74	AU	N.A.		8.54E 03			
54193	COUNTER	B-1	KVRDIP 16	96C	RECORDER	REL Q	-054C 071C	/ 0			
	BINARY	48	N.R.	73/74	AU	TCVPC	411CY2.2G50X	4.94E 03			
54193	COUNTER	B-1	KVRDIP 16	96C	RECORDER	RELPR Q	-054C 071C	/ 0			
	BINARY	48	N.R.	75/76	AU	TCVPC	139CY2.2G50X	1.67E 03			
54195	SHIFT REG	JB	DIP 16	50C	DISPLAY	FIELD Q	025C	/ 0			
	N.R.	41	N.R.	75/76	GT	N.A.		7.45E 05			
54195	SHIFT REG	JB	DIP 16	29C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	41	N.R.	75/75	GT	EQP OP	18CY 95X	4.71E 04			
54195	SHIFT REG	JB	DIP 16		RADAR	REL Q		/ 0			
	N.R.	41	N.R.	77/77	AIU	EQP OP		1.66E 04			
54197	COUNTER	B-1	AUDIP 14		DIG PROC	FIELD G		/ 0			
	BINARY	34	N.R.	75/76	AIU	N.A.		3.66E 04			
5420	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0			
	N.R.	2	N.R.	72/74	AI	N.A.		1.04E 04			
5420	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0			
	N.R.	2	N.R.	72/74	AU	N.A.		7.03E 04			
5420	GATE	JB	FPK 14		RADAR	FIELD G		/ 0			
	N.R.	2	N.R.	74/75	AIU	N.A.		5.98E 04			
5420	GATE	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0			
	N.R.	2	N.R.	74/76	NSS	N.A.		2.16E 05			
5420	GATE	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0			
	N.R.	2	N.R.	74/74	NSS	EQP OP		3.13E 04			

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5420	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	2	N.R.	74/74	NSS	VIB FTG	1 AXIS	5.31E 03		
						EQP OP	025C	/ 0		
								1.59E 04		
5420	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	2	N.R.	75/76	GT	N.A.		1.17E 05		
5420	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	2	N.R.	75/75	GT	EQP OP	16CY 95%	7.73E 03		
5420	GATE	JB	DIP 14		PROCESS	FIELD G		/ 0		
	N.R.	2	N.R.	74/75	AU	N.A.		3.42E 03		
5420	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	2	N.R.	75/76	GT	N.A.		1.28E 06		
5420	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	2	N.R.	75/75	GT	EQP OP	18CY 95%	4.20E 04		
5420	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	2	N.R.	75/75	GT	EQP OP	24CY 95%	1.36E 04		
5420	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/76	AU	TCVPC	10CY 2.2G 81%	5.20E 03		
5420	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	75/75	AU	TCVPC	5CY 2.2G 81%	1.04E 03		
5420	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/77	AU	TCVPC	6CY 2.2G 81%	1.88E 05		
5420	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/77	AU	TCVPC	7CY 2.2G 81%	1.91E 05		
5420	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/77	AU	TCVPC	8CY 2.2G 81%	4.08E 04		
5420	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/76	AU	TCVPC	9CY 2.2G 81%	5.62E 03		
5420	GATE	JB	DIP 14		RADAR	REL Q		/ 0		
	N.R.	2	N.R.	77/77	AU	EQP OP		1.69E 04		
5420	GATE	JB	DIP 14		RECORDER	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AU	N.A.		1.71E 04		
5420	GATE	JB	DIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	2	N.R.	73/74	AU	TCVPC	411CY 2.2G 50%	9.86E 03		
5420	GATE	JB	DIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	2	N.R.	75/76	AU	TCVPC	139CY 2.2G 50%	3.33E 03		
5420	GATE	B1/JB	FPK 14		PROCESS	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AI	N.A.		2.05E 04		
5420	GATE	B1/JB	FPK 14	81C	PROCESS	RELPR Q	-054C 071C	/ 0		
	N.R.	2	N.R.	75/75	AI	TCVPC	310CY 1G 66%	1.80E 04		
5420	GATE	B-1	FPK 14		PROCESS	FIELD G		/ 0		
	N.R.	2	N.R.	75/76	AI	N.A.		6.61E 04		
5420	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AU	N.A.		2.11E 05		
5420	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	N.R.	2	N.R.	74/76	AU	N.A.		1.09E 06		
5420	GATE	B-1	FPK 14		NAVIGATE	FIELD Q		/ 0		
	N.R.	2	N.R.	72/74	AU	N.A.		1.99E 04		
5420	GATE	B-1	FPK 14		NAVIGATE	FIELD G		/ 0		
	N.R.	2	N.R.	74/76	AU	N.A.		8.87E 04		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5420	GATE N.R.	B-1 2	FPK 14 N.R.	81C 74/75	NAVIGATE: AU	REL Q TCVPC	-054C 071C 195CY1.7G62X	/ 0 1.45E 04		
				74/75				/ 1 9.67E 03	1/ OPEN	
5420	GATE N.R.	B-1 2	FPK 14 N.R.	81C 75/76	NAVIGATE: AU	RELPR Q TCVPC	-054C 071C 236CY1.8G60X	/ 0 1.18E 04		
5420	GATE N.R.	B-1 2	DIP 14 N.R.		NAVIGATE: AI	FIELD G N.A.		/ 0 3.88E 03		
5420	GATE N.R.	B-1 2	DIP 14 N.R.	81C 75/76	NAVIGATE: AI	RELPR Q TCVPC	-054C 071C 835CY1.6G62X	/ 0 6.89E 04		
5420	GATE N.R.	B-1 2	KVRFPK 14 N.R.		RADAR AIU	FIELD G N.A.		/ 1 2.87E 05	1/ OPEN	
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	60C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 1.79E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	60C 75/75	DIG PROC: AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 2.34E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.		DIG PROC: AU	FIELD Q N.A.		/ 0 1.07E 05		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/74	DIG PROC: AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 4.77E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/75	DIG PROC: AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 2.49E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.		DIG PROC: AIU	FIELD Q N.A.		/ 0 3.77E 05		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.		DIG PROC: AIU	FIELD G N.A.		/ 0 7.43E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/74	NAVIGATE: AIU	REL Q TCVPC	-054C 071C 117CY1.6G62X	/ 0 2.34E 03		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/75	NAVIGATE: AIU	REL Q TCVPC	-054C 071C 545CY1.6G62X	/ 0 1.09E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	81C 73/74	NAVIGATE: AIU	REL Q TCVPC	-054C 071C 62CY 1.6G62X	/ 0 1.24E 03		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.		DISPLAY AI	FIELD Q N.A.		/ 0 2.68E 04		
5420	GATE N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 1.36E 04		
5420	GATE N.R.	C-1 2	FPK 14 N.R.		RADAR AIU	FIELD G N.A.		/ 0 1.74E 06		
5420	GATE N.R.	C-1 2	KVRFPK 14 N.R.		RADAR AIU	FIELD Q N.A.		/ 0 3.32E 05		
5420	GATE N.R.	C-1 2	KVRFPK 14 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50X	/ 0 1.42E 04		
5420	GATE N.R.	C-1 2	KVRDIP 14 N.R.	30C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 3.70E 04		
5420	GATE N.R.	N.R. 2	KVRDIP 14 N.R.		RADAR AU	FIELD Q N.A.		/ 0 3.32E 05		
5420	GATE N.R.	NONE 2	KVRDIP 14 N.R.	35C 74/75	COMMUNIC: GM	REL Q EQP OP	025C	/ 0 1.87E 03		
5425	GATE N.R.	JB 2	FPK 14 N.R.		RADAR AU	FIELD Q N.A.		/ 0 2.34E 04		

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DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5425	GATE	JB	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	2	N.R.	74/75	AIU	N.A.		1.74E 04	
5425	GATE	JB	KVRDIP 14		PROCESS	FIELD G		/ 0	
	N.R.	2	N.R.	74/75	AU	N.A.		3.42E 03	
5425	GATE	JB	KVRDIP 14		RECORDER	FIELD Q		/ 0	
	N.R.	2	N.R.	72/74	AU	N.A.		1.71E 04	
5425	GATE	JB	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0	
	N.R.	2	N.R.	73/74	AU	TCVPC	411CY2.2G50X	9.87E 03	
5425	GATE	JB	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0	
	N.R.	2	N.R.	75/76	AU	TCVPC	139CY2.2G50X	3.33E 03	
5425	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0	
	N.R.	2	N.R.	76/76	GF	N.A.		1.69E 04	
5425	GATE	B-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	2	N.R.	74/75	AIU	N.A.		1.87E 03	
5425	GATE	C-1	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	2	N.R.	72/74	AIU	N.A.		1.84E 03	
5425	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	2	N.R.	75/76	AIU	N.A.		1.13E 04	
5425	GATE	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0	
	N.R.	2	N.R.	75/76	GM	N.A.		1.73E 05	
5425	GATE	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0	
	N.R.	2	N.R.	75/76	GM	EQ OP		5.36E 04	
5427	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0	
	N.R.	3	N.R.	75/76	GT	N.A.		5.86E 04	
5427	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0	
	N.R.	3	N.R.	75/75	GT	EQ OP	16CY 95X	3.09E 03	
5427	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0	
	N.R.	3	N.R.	75/76	GT	N.A.		2.88E 05	
5427	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	3	N.R.	75/75	GT	EQ OP	18CY 95X	1.68E 04	
5427	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0	
	N.R.	3	N.R.	75/75	GT	EQ OP	24CY 95X	7.92E 03	
5427	GATE	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0	
	N.R.	3	N.R.	76/77	MGB	EQ OP		4.95E 03	
5427	GATE	C-1	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	3	N.R.	72/74	AIU	N.A.		1.84E 03	
5427	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	3	N.R.	75/76	AIU	N.A.		1.13E 04	
5430	GATE	JB	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	1	N.R.	72/74	AU	N.A.		2.34E 04	
5430	GATE	JB	FPK 14		RADAR	FIELD G		/ 1	
	N.R.	1	N.R.	74/75	AIU	N.A.		1.74E 04	
5430	GATE	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0	
	N.R.	1	N.R.	74/76	NSS	N.A.		3.90E 06	
5430	GATE	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0	
	N.R.	1	N.R.	74/74	NSS	EQ OP		5.64E 05	
5430	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	1	N.R.	74/74	NSS	VIB FTG	1 AXIS	9.43E 04	
						EQ OP	025C	/ 0	
								2.83E 05	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. G/TES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5430	GATE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	1	N.R.	74/74	NSS	VIB FTG	1 AXIS	1.33E 03		
						EQP OP	025C	/ 0		
								3.98E 03		
5430	GATE	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	1	N.R.	75/76	GT	N.A.		1.36E 05		
5430	GATE	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	1	N.R.	75/75	GT	EQP OP	16CY 95X	1.35E 04		
5430	GATE	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	1	N.R.	75/76	GT	N.A.		2.16E 05		
5430	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	1	N.R.	75/75	GT	EQP OP	18CY 95X	2.02E 04		
5430	GATE	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	1	N.R.	75/75	GT	EQP OP	24CY 95X	1.30E 04		
5430	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	73/76	AU	TCVPC	10CY 2.2G 81X	2.40E 03		
5430	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	8.67E 04		
5430	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	6.72E 05		
5430	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	1.88E 04		
5430	GATE	JB	DIP 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	73/76	AU	TCVPC	9CY 2.2G 81X	2.59E 03		
5430	GATE	JB	DIP 14		RADAR	REL Q		/ 0		
	N.R.	1	N.R.	77/77	AU	EQP OP		2.19E 04		
5430	GATE	B1/JB	FPK 14		PROCESS	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AI	N.A.		2.05E 04		
5430	GATE	B1/JB	FPK 14	81C	PROCESS	RELPR Q	-054C 071C	/ 0		
	N.R.	1	N.R.	75/75	AI	TCVPC	310CY 1G 66X	1.80E 04		
5430	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	1	N.R.	76/76	GF	N.A.		1.15E 04		
5430	GATE	B-1	FPK 14		PROCESS	FIELD G		/ 0		
	N.R.	1	N.R.	75/76	AI	N.A.		6.61E 04		
5430	GATE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AU	N.A.		8.18E 04		
5430	GATE	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	N.R.	1	N.R.	74/76	AU	N.A.		4.22E 05		
5430	GATE	B-1	FPK 14		NAVIGATE	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AU	N.A.		1.59E 04		
5430	GATE	B-1	FPK 14		NAVIGATE	FIELD G		/ 0		
	N.R.	1	N.R.	74/76	AU	N.A.		7.15E 04		
5430	GATE	B-1	FPK 14	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	74/75	AU	TCVPC	195CY 1.7G 62X	1.93E 04		
5430	GATE	B-1	FPK 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	N.R.	1	N.R.	75/76	AU	TCVPC	236CY 1.8G 60X	9.46E 03		
5430	GATE	B-1	DIP 14		NAVIGATE	FIELD G		/ 0		
	N.R.	1	N.R.	75/76	AI	N.A.		7.75E 03		
5430	GATE	B-1	DIP 14	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
	N.R.	1	N.R.	75/76	AI	TCVPC	835CY 1.6G 62X	1.38E 05		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
15430	GATE	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AIU	N.A.		7.53E 04		
15430	GATE	B-1	KVRDIP 14		DIG PROC	FIELD G		/ 0		
	N.R.	1	N.R.	74/76	AIU	N.A.		1.49E 04		
15430	GATE	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AI	N.A.		5.97E 03		
15430	GATE	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	74/75	AI	TCVPC	118CY2.2G53E	3.02E 03		
15430	GATE	C-1	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	1	N.R.	72/74	AIU	N.A.		3.14E 05		
15430	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	1	N.R.	75/76	AIU	N.A.		1.78E 06		
15430	GATE	C-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	1	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50E	1.34E 04		
15430	GATE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0		
	N.R.	1	N.R.	76/76	GT	RQP OP		1.71E 05		
15430	GATE	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0		
	N.R.	1	N.R.	75/78	AU	N.A.		2.70E 05		
15430	GATE	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	1	N.R.	74/75	AU	TCVPC	6CY 2.2G 88E	1.71E 05		
15432	GATE	B-1	KVRDIP 14		PROCESS	FIELD G		/ 0		
	N.R.	4	N.R.	74/75	AU	N.A.		2.05E 04		
15432	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62E	1.55E 04		
15432	GATE	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62E	2.03E 04		
15432	GATE	B-1	KVRDIP 14		RECORDER	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AU	N.A.		1.02E 05		
15432	GATE	B-1	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50E	5.92E 04		
15432	GATE	B-1	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50E	2.00E 04		
15437	BUFFER	JB	FPK 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AU	N.A.		3.12E 04		
15437	BUFFER	JB	FPK 14		RADAR	FIELD G		/ 0		
	N.R.	4	N.R.	74/75	AIU	N.A.		2.31E 04		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5437	BUFFER	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0			
	N.R.	4	N.R.	74/76	NSS	N.A.		1.08E 05			
5437	BUFFER	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0			
	N.R.	4	N.R.	74/74	NSS	EQP OP		1.57E 04			
5437	BUFFER	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0			
	N.R.	4	N.R.	74/74	NSS	VIB FTG	1 AXIS	2.66E 03			
						EQP OP	025C	/ 0			
								7.96E 03			
5437	BUFFER	JB	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0			
	N.R.	4	N.R.	75/76	GT	N.A.		3.66E 04			
5437	BUFFER	JB	DIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0			
	N.R.	4	N.R.	75/75	GT	EQP OP	16CY 95X	8.89E 03			
5437	BUFFER	JB	DIP 14		PROCESS	FIELD G		/ 0			
	N.R.	4	N.R.	74/75	AU	N.A.		5.12E 03			
5437	BUFFER	JB	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0			
	N.R.	4	N.R.	75/76	GT	N.A.		6.69E 05			
5437	BUFFER	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	4	N.R.	75/75	GT	EQP OP	18CY 95X	5.42E 04			
5437	BUFFER	JB	DIP 14	61C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	4	N.R.	75/75	GT	EQP OP	24CY 95X	1.92E 04			
5437	BUFFER	JB	DIP 14		RADAR	REL Q		/ 0			
	N.R.	4	N.R.	77/77	AIU	EQP OP		7.41E 04			
5437	BUFFER	JB	DIP 14		RECORDER	FIELD Q		/ 0			
	N.R.	4	N.R.	72/74	AU	N.A.		2.56E 04			
5437	BUFFER	JB	DIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0			
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50X	1.48E 04			
5437	BUFFER	JB	DIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0			
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50X	5.00E 03			
5437	BUFFER	JB	DIP 14	35C	SONAR	FIELD G	025C	/ 0			
	N.R.	4	N.R.	74/76	NSS	N.A.		2.16E 05			
5437	BUFFER	JB	DIP 14	35C	SONAR	REL Q	025C	/ 0			
	N.R.	4	N.R.	74/74	NSS	EQP OP		3.13E 04			
5437	BUFFER	JB	DIP 14		SONAR	CHECK Q	28HZ 1.3G	/ 0			
	N.R.	4	N.R.	74/74	NSS	VIB FTG	1 AXIS	5.31E 03			
						EQP OP	025C	/ 0			
								1.59E 04			
5437	BUFFER	B1/JB	DIP 14		RADAR	FIELD Q		/ 0			
	N.R.	4	N.R.	76/76	GF	N.A.		8.28E 04			
5437	BUFFER	B-1	DIP 14	35C	COMMUNIC	FIELD Q	025C	/ 0			
	N.R.	4	N.R.	75/76	GT	N.A.		4.51E 04			
5437	BUFFER	B-1	DIP 14	35C	DISPLAY	FIELD Q	025C	/ 0			
	N.R.	4	N.R.	75/76	GT	N.A.		2.06E 05			
5437	BUFFER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	3.32E 04			
5437	BUFFER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0			
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	4.34E 04			
5437	BUFFER	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0			
	N.R.	4	N.R.	72/74	AU	N.A.		4.26E 05			
5437	BUFFER	B-1	KVRDIP 14	81C	DIG PROC	CHECK Q	-054C 071C	/ 0			
	N.R.	4	N.R.	74/74	AU	TCVPC	3CY 1G 88X	2.39E 03			
5437	BUFFER	B-1	KVRDIP 14	81C	DIG PROC	REL Q	-054C 071C	/ 1	1/ OPEN		
	N.R.	4	N.R.	74/74	AU	TCVPC	707CY 1G 56X	1.72E 05			

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
15437	BUFFER N.R.	B-1 4	KVRDIP 14 N.R.	81C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 9.95E 04	
15437	BUFFER N.R.	C-1 4	KVRDIP 14 N.R.	30C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 4.50E 04	
15438	BUFFER N.R.	B1/JB 4	DIP 14 N.R.	76/76	RADAR GV	FIELD Q N.A.		/ 0 1.36E 05	
15438	BUFFER N.R.	B-1 4	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 4.62E 03	
15438	BUFFER N.R.	B-1 4	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 6.04E 03	
15440	BUFFER N.R.	JB 2	FPK 14 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 1.56E 04	
15440	BUFFER N.R.	JB 2	FPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.16E 04	
15440	BUFFER N.R.	JB 2	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.24E 07	
15440	BUFFER N.R.	JB 2	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.80E 06	
15440	BUFFER N.R.	JB 2	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 2.92E 05	
						EQP OP	025C	/ 0 8.76E 05	
15440	BUFFER N.R.	JB 2	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.33E 04	
						EQP OP	025C	/ 0 3.98E 04	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 1.47E 04	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 6.96E 03	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 3.09E 04	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 1.26E 03	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 3.39E 03	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 2.84E 04	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 2.95E 04	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 6.27E 03	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 2.16E 05	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 3.13E 04	
15440	BUFFER N.R.	JB 2	DIP 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 5.31E 03	
						EQP OP	025C	/ 0 1.59E 04	
15440	BUFFER N.R.	B1/JB 2	FPK 14 N.R.	72/74	PROCESS AI	FIELD Q N.A.		/ 0 4.11E 03	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
15440	BUFFER N.R.	B1/JB 2	FPK 14 N.R.	81C 75/75	PROCESS AI	RELPR Q TCVPC	-054C 071C 310CY 1G 66X	/ 0 3.59K 03		
15440	BUFFER N.R.	B1/JB 2	DIP 14 N.R.	81C 76/76	RADAR GF	FIELD Q N.A.		/ 0 3.35K 04		
15440	BUFFER N.R.	B-1 2	FPK 14 N.R.	81C 75/76	PROCESS AI	FIELD G N.A.		/ 0 1.32K 04		
15440	BUFFER N.R.	B-1 2	KVRDIP 14 N.R.	35C 73/77	COMMUNIC GF	FIELD G N.A.	025C	/ 0 1.12K 05		
15440	BUFFER N.R.	B-1 2	KVRDIP 14 N.R.	81C 72/74	DIG PROC AU	FIELD Q N.A.		/ 0 4.26K 04		
15440	BUFFER N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 1.91K 04		
15440	BUFFER N.R.	B-1 2	KVRDIP 14 N.R.	81C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 9.95K 03		
15440	BUFFER N.R.	N.R. 2	KVRDIP 14 N.R.	81C 75/78	RADAR AU	FIELD Q N.A.		/ 0 7.55K 05		
15440	BUFFER N.R.	N.R. 2	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 2.21K 05		
				74/75				/ 3 2.24K 05		
15440	BUFFER N.R.	NONE 2	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	FIELD G N.A.	025C	/ 0 1.73K 05		
15440	BUFFER N.R.	NONE 2	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	RELPR Q EQP OP	025C	/ 0 5.36K 04		
15442	DECODER BCD/DECIMAL	JB 18	FPK 16 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 4.33K 05		
15442	DECODER BCD/DECIMAL	JB 18	FPK 16 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 6.27K 04		
15442	DECODER BCD/DECIMAL	JB 18	FPK 16 N.R.	35C 74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.06K 04		
						EQP OP	025C	/ 0 3.19K 04		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 5.86K 04		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 1.55K 03		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 3.09K 03		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	81C 74/75	PROCESS AU	FIELD G N.A.		/ 0 1.71K 03		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 1.45K 04		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 7.98K 03		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 1.24K 04		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	81C 77/77	RADAR AIU	REL Q EQP OP		/ 0 9.66K 03		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	81C 72/74	RECORDER AU	FIELD Q N.A.		/ 0 8.54K 03		
15442	DECODER BCD/DECIMAL	JB 18	DIP 16 N.R.	81C 73/74	RECORDER AU	REL Q TCVPC	-054C 071C 411CY 2.2G 50X	/ 0 4.94K 03		

DIGITAL DEVICE DATA

VARIOUS TTL		:MANUFACTURER :OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
: PART : NO.	: DEVICE : FUNCTION	: SCR.N. : CLASS	: PACKAGE/ : PINS	: JCT.* : TEMP.	: EQUIP. : TYPE	: DATA : CLASS.	: STRESS : LEVEL	: #TESTED/ : #FAILED	: REMARKS
:	:	: NO. : GATES	: CHIP : PROTECT.	: TEST : DATE	: APPL. : ENV.	: TEST : TYPE	:	: PART : HOURS	:
: 5442	: DECODER	: JB	: DIP 16	: 81C	: RECORDER	: RELPR Q	: -054C 071C	: / 0	:
:	: BCD/DECIMAL	: 18	: N.R.	: 75/76	: AU	: TCVPC	: 139CY2.2G50X	: 1.67E 03	:
: 5442	: DECODER	: B1/JB	: DIP 16	:	: RADAR	: FIELD Q	:	: / 0	:
:	: BCD/DECIMAL	: 18	: N.R.	: 76/76	: GF	: N.A.	:	: 1.09E 04	:
: 5442	: DECODER	: B-1	: KVRDIP 16	:	: DIG PROC	: FIELD Q	:	: / 0	:
:	: BCD/DECIMAL	: 18	: N.R.	: 72/74	: AIU	: N.A.	:	: 6.03E 05	:
: 5442	: DECODER	: B-1	: KVRDIP 16	:	: DIG PROC	: FIELD G	:	: / 0	:
:	: BCD/DECIMAL	: 18	: N.R.	: 74/76	: AIU	: N.A.	:	: 1.19E 05	:
: 5442	: DECODER	: B-1	: KVRDIP 16	:	: DISPLAY	: FIELD Q	:	: / 0	:
:	: BCD/DECIMAL	: 18	: N.R.	: 72/74	: AI	: N.A.	:	: 1.79E 04	:
: 5442	: DECODER	: B-1	: KVRDIP 16	: 81C	: DISPLAY	: REL Q	: -054C 071C	: / 0	:
:	: BCD/DECIMAL	: 18	: N.R.	: 74/75	: AI	: TCVPC	: 118CY2.2G53X	: 9.06E 03	:
: 5450	: GATE	: JB	: DIP 14	: 35C	: CONTROL	: RELPR Q	: 025C	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 76/77	: MGB	: EQP OP	:	: 4.95E 03	:
: 5450	: GATE	: JB	: DIP 14	:	: RADAR	: REL Q	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 77/77	: AIU	: EQP OP	:	: 2.26E 03	:
: 5450	: GATE	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 75/75	: AI	: TCVPC	: 13CY1.3G 62X	: 1.54E 03	:
: 5450	: GATE	: B-1	: KVRDIP 14	: 60C	: DIG PROC	: REL Q	: -054C 050C	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 75/75	: AI	: TCVPC	: 17CY1.3G 62X	: 2.01E 03	:
: 5450	: GATE	: B-1	: KVRDIP 14	:	: DIG PROC	: FIELD Q	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 72/74	: AU	: N.A.	:	: 1.92E 05	:
: 5450	: GATE	: B-1	: KVRDIP 14	: 81C	: DIG PROC	: RELPR Q	: -054C 071C	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 74/75	: AU	: TCVPC	: 368CY 1G 56X	: 4.48E 04	:
: 5450	: GATE	: B-1	: KVRDIP 14	:	: DIG PROC	: FIELD Q	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 72/74	: AIU	: N.A.	:	: 1.13E 06	:
: 5450	: GATE	: B-1	: KVRDIP 14	:	: DIG PROC	: FIELD G	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 74/76	: AIU	: N.A.	:	: 2.23E 05	:
: 5450	: GATE	: B-1	: KVRDIP 14	:	: NAVIGATE	: FIELD G	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 74/75	: AU	: N.A.	:	: 1.85E 04	:
: 5450	: GATE	: B-1	: KVRDIP 14	:	: DISPLAY	: FIELD Q	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 72/74	: AI	: N.A.	:	: 1.49E 04	:
: 5450	: GATE	: B-1	: KVRDIP 14	: 81C	: DISPLAY	: REL Q	: -054C 071C	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 74/75	: AI	: TCVPC	: 118CY2.2G53X	: 7.55E 03	:
: 5450	: GATE	: N.R.	: KVRDIP 14	:	: RADAR	: FIELD Q	:	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 75/78	: AU	: N.A.	:	: 7.34E 04	:
: 5450	: GATE	: N.R.	: KVRDIP 14	: 65C	: RADAR	: RELPR Q	: -054C 055C	: / 0	:
:	: EXPANDABLE	: 6	: N.R.	: 74/75	: AU	: TCVPC	: 6CY 2.2G 88X	: 2.80E 03	:
:	:	:	:	: 74/75	:	:	:	: / 1	:
:	:	:	:	:	:	:	:	: 1.09E 05	:
: 5451	: GATE	: JB	: FPK 14	:	: RADAR	: FIELD Q	:	: / 0	:
:	: N.R.	: 6	: N.R.	: 72/74	: AU	: N.A.	:	: 5.21E 03	:
: 5451	: GATE	: JB	: FPK 14	:	: RADAR	: FIELD G	:	: / 0	:
:	: N.R.	: 6	: N.R.	: 74/75	: AIU	: N.A.	:	: 3.86E 03	:
: 5451	: GATE	: JB	: FPK 14	: 35C	: SONAR	: FIELD G	: 025C	: / 0	:
:	: N.R.	: 6	: N.R.	: 74/76	: NSS	: N.A.	:	: 5.36E 06	:
: 5451	: GATE	: JB	: FPK 14	: 35C	: SONAR	: REL Q	: 025C	: / 0	:
:	: N.R.	: 6	: N.R.	: 74/74	: NSS	: EQP OP	:	: 7.76E 05	:

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRW. CLASS	PACKAGE/ PINS	JCT. ° TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
15451	GATE N.R.	JB 6	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.31E 05	
						EQP OP	025C	/ 0 3.94E 05	
15451	GATE N.R.	B-1 6	FPK 14 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 2.63E 05	
15451	GATE N.R.	B-1 6	FPK 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 1.35E 06	
15451	GATE N.R.	B-1 6	DIP 14 N.R.	81C 75/76	NAVIGATE AI	RELPR Q TCVPC	-054C 071C 835CY1.6G62X	/ 0 1.38E 05	
15451	GATE N.R.	B-1 6	KVRFPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 2.32E 05	
15451	GATE N.R.	B-1 6	KVRDIP 14 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 1.13E 06	
15451	GATE N.R.	B-1 6	KVRDIP 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.23E 05	
15451	GATE N.R.	C-1 6	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 5.93E 05	
15451	GATE N.R.	C-1 6	KVRFPK 14 N.R.	72/74	RADAR AIU	FIELD N.A.		/ 0 2.74E 05	
15451	GATE N.R.	C-1 6	KVRFPK 14 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-05 071C 6CY 1 50X	/ 0 1.19E 04	
15453	GATE N.R.	N.R. 5	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 1.74E 03	
15453	GATE N.R.	N.R. 5	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	0 2.80E 04	
15454	GATE N.R.	JB 5	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.08E 05	
15454	GATE N.R.	JB 5	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.57E 04	
15454	GATE N.R.	JB 5	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 2.66E 03	
						EQP OP	025C	/ 0 7.96E 03	
15454	GATE N.R.	B-1 5	FPK 14 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 6.89E 04	
15454	GATE N.R.	B-1 5	FPK 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 3.55E 05	
15454	GATE N.R.	B-1 5	KVRFPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.69E 05	
15454	GATE N.R.	C-1 5	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 5.23E 04	
15454	GATE N.R.	C-1 5	KVRFPK 14 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 6.74E 04	
15454	GATE N.R.	C-1 5	KVRFPK 14 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50X	/ 0 2.61E 03	
15470	FLIPPLOP JK	JB 11	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 1.14E 07	
15470	FLIPPLOP JK	JB 11	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 1.65E 06	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
15470	FLIPFLOP JK	JB 11	FPK 14 N.R.	74/74	SONAR MSS	CHECK Q VIB PTG	28HZ 1.3G 1 AXIS	/ 0 2.80E 05		
						EQP OP	025C	/ 0 8.40E 05		
15472	FLIPFLOP JK	JB 8	FPK 14 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 1.04E 04		
15472	FLIPFLOP JK	JB 8	FPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 7.71E 03		
15472	FLIPFLOP JK	JB 8	DIP 14 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 7.33E 03		
15472	FLIPFLOP JK	JB 8	DIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95%	/ 0 1.16E 03		
15472	FLIPFLOP JK	JB 8	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81%	/ 0 1.42E 04		
15472	FLIPFLOP JK	JB 8	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81%	/ 0 1.41E 04		
15472	FLIPFLOP JK	JB 8	DIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81%	/ 0 2.24E 03		
15472	FLIPFLOP JK	B-1 8	FPK 14 N.R.	72/74	NAVIGATE AU	FIELD Q N.A.		/ 0 7.97E 03		
15472	FLIPFLOP JK	B-1 8	FPK 14 N.R.	74/76	NAVIGATE AU	FIELD G N.A.		/ 0 3.72E 04		
15472	FLIPFLOP JK	B-1 8	FPK 14 N.R.	81C 74/75	NAVIGATE AU	REL Q TCVPC	-054C 071C 195CY1.7G62%	/ 0 9.67E 03		
15472	FLIPFLOP JK	B-1 8	FPK 14 N.R.	81C 75/76	NAVIGATE AU	RELPR Q TCVPC	-054C 071C 236CY1.8G60%	/ 0 4.73E 03		
15472	FLIPFLOP JK	B-1 16	KVRFKP 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 7.49E 04		
15472	FLIPFLOP JK	C-1 8	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 5.40E 05		
15472	FLIPFLOP JK	C-1 8	KVRDIP 14 N.R.	30C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 8.74E 03		
15472	FLIPFLOP JK	C-1 16	KVRFKP 14 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 7.73E 04		
15472	FLIPFLOP JK	C-1 16	KVRFKP 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 9.01E 04		
15472	FLIPFLOP JK	C-1 16	KVRFKP 14 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50%	/ 0 2.70E 03		
15472	FLIPFLOP JK	N.R. 8	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 8.61E 04		
15472	FLIPFLOP JK	N.R. 8	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88%	/ 0 5.04E 04		
15472	FLIPFLOP JK	N.R. 16	KVRFKP 14 N.R.	75/78	RADAR AI	FIELD Q N.A.		/ 0 5.79E 03		
15472	FLIPFLOP JK	NONE 8	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	FIELD G N.A.	025C	/ 0 5.19E 05		
15472	FLIPFLOP JK	NONE 8	KVRDIP 14 N.R.	35C 74/75	COMMUNIC GM	REL Q EQP OP	025C	/ 0 3.73E 03		
15472	FLIPFLOP JK	NONE 8	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	RELPR Q EQP OP	025C	/ 0 1.61E 05		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. ° TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5473	FLIPFLOP JK	JB 16	FPK 14 N.R.	72/74	RADAR AI	FIELD Q N.A.		/ 0 1.82E 04			
5473	FLIPFLOP JK	JB 16	FPK 14 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 1.28E 05			
5473	FLIPFLOP JK	JB 16	FPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.08E 05			
5473	FLIPFLOP JK	JB 16	FPK 14 N.R.	35C 74/76	SONAR MSS	FIELD G N.A.	025C	/ 0 6.49E 05			
5473	FLIPFLOP JK	JB 16	FPK 14 N.R.	35C 74/74	SONAR MSS	REL Q EQP OP	025C	/ 0 9.40E 04			
5473	FLIPFLOP JK	JB 16	FPK 14 N.R.	74/74	SONAR MSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.59E 04			
						EQP OP	025C	/ 0 4.78E 04			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	35C 76/77	CONTROL MGB	RELPR Q EQP OP	025C	/ 0 2.48E 03			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPFC	-054C 071C 10CY 2.2G 81X	/ 0 1.64E 04			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 75/75	RADAR AU	REL Q TCVPFC	-054C 071C 4CY 2.2G 81X	/ 0 1.31E 03			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 75/75	RADAR AU	REL Q TCVPFC	-054C 071C 5CY 2.2G 81X	/ 0 3.28E 03			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPFC	-054C 071C 6CY 2.2G 81X	/ 0 1.83E 05			
				76/76				/ 2 4.41E 05	2/DEGRADED OVERSTRESS		
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPFC	-054C 071C 7CY 2.2G 81X	/ 0 6.14E 05			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPFC	-054C 071C 8CY 2.2G 81X	/ 0 1.34E 05			
5473	FLIPFLOP JK	JB 16	DIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPFC	-054C 071C 9CY 2.2G 81X	/ 0 1.84E 04			
5473	FLIPFLOP JK	B-1 16	FPK 14 N.R.	72/74	NAVIGATE AU	FIELD Q N.A.		/ 0 1.19E 04			
5473	FLIPFLOP JK	B-1 16	FPK 14 N.R.	74/76	NAVIGATE AU	FIELD G N.A.		/ 0 5.44E 04			
5473	FLIPFLOP JK	B-1 16	FPK 14 N.R.	81C 74/75	NAVIGATE AU	REL Q TCVPFC	-054C 071C 195CY1.7G62X	/ 0 1.45E 04			
5473	FLIPFLOP JK	B-1 16	FPK 14 N.R.	81C 75/76	NAVIGATE AU	RELPR Q TCVPFC	-054C 071C 236CY1.8G60X	/ 0 7.09E 03			
5473	FLIPFLOP JK	B-1 16	DIP 14 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 1.05E 05			
5473	FLIPFLOP JK	B-1 16	DIP 14 N.R.	81C 75/76	NAVIGATE AI	RELPR Q TCVPFC	-054C 071C 835CY1.6G62X	/ 0 5.52E 05			
5473	FLIPFLOP JK	B-1 16	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 4.64E 05			
5473	FLIPFLOP JK	B-1 16	KVRFPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 2.02E 05			
5473	FLIPFLOP JK	B-1 16	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPFC	-054C 050C 13CY1.3G 62X	/ 0 2.73E 04			

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE			RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. ° TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5473	FLIPFLOP JK	B-1 16	KVRDIP 14 N.R.	60C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CV1.3G 62X	/ 0 3.57E 04		
5473	FLIPFLOP JK	B-1 16	KVRDIP 14 N.R.	81C 74/74	NAVIGATE AIU	REL Q TCVPC	-054C 071C 117CV1.6G62X	/ 0 2.34E 03		
5473	FLIPFLOP JK	B-1 16	KVRDIP 14 N.R.	81C 74/75	NAVIGATE AIU	REL Q TCVPC	-054C 071C 543CY1.6G62X	/ 0 1.09E 04		
5473	FLIPFLOP JK	B-1 16	KVRDIP 14 N.R.	81C 73/74	NAVIGATE AIU	REL Q TCVPC	-054C 071C 62CY 1.6G62X	/ 0 1.24E 03		
5473	FLIPFLOP JK	C-1 16	FPK 14 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 2.25E 04		
				75/76				/ 1 2.30E 06		
5473	FLIPFLOP JK	C-1 16	KVRFPK 14 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 2.61E 05		
5473	FLIPFLOP JK	C-1 16	KVRFPK 14 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50X	/ 0 1.19E 04		
5473	FLIPFLOP JK	N.R. 16	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 8.02E 03		
5473	FLIPFLOP JK	N.R. 16	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 1.12E 04		
5473	FLIPFLOP JK	NONE 16	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	FIELD G N.A.	025C	/ 0 5.19E 05		
5473	FLIPFLOP JK	NONE 16	KVRDIP 14 N.R.	35C 74/75	COMMUNIC GM	REL Q EQP OP	025C	/ 0 5.60E 03		
5473	FLIPFLOP JK	NONE 16	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	RELPR Q EQP OP	025C	/ 0 1.61E 05		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	72/74	RADAR AI	FIELD Q N.A.		/ 0 7.81E 03		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 1.04E 04		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.35E 04		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 4.82E 06		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 6.97E 03		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 3.59E 04		
						EQP OP	025C	/ 0 1.08E 05		
5474	FLIPFLOP D	JB 12	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 8.23E 04		
						EQP OP	025C	/ 0 2.47E 05		
5474	FLIPFLOP D	JB 12	KVRDIP 14 N.R.	35C 73/77	COMMUNIC GT	FIELD G N.A.	025C	/ 0 1.32E 07		
5474	FLIPFLOP D	JB 12	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 3.22E 05		
5474	FLIPFLOP D	JB 12	KVRDIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 15CY 95X	/ 0 3.94E 04		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5474	FLIPFLOP	JB	KVRDIP 14	61C	COMMUNIC	REL G	004C 051C	/ 0		
	D	12	N.R.	75/75	GT	EQP OP	16CY 95X	1.16E 03		
5474	FLIPFLOP	JB	KVRDIP 14		PROCESS	FIELD G		/ 0		
	D	12	N.R.	74/75	AU	N.A.		3.42E 03		
5474	FLIPFLOP	JB	KVRDIP 14	35C	DISPLAY	FIELD Q	025C	/ 0		
	D	12	N.R.	75/76	GT	N.A.		2.00E 06		
5474	FLIPFLOP	JB	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	D	12	N.R.	75/75	GT	EQP OP	18CY 95X	1.40E 05		
5474	FLIPFLOP	JB	KVRDIP 14	61C	DISPLAY	REL G	004C 051C	/ 0		
	D	12	N.R.	75/75	GT	EQP OP	24CY 95X	4.98E 04		
5474	FLIPFLOP	JB	KVRDIP 14		RADAR	REL Q		/ 0		
	D	12	N.R.	77/77	AIU	EQP OP		7.59E 04		
5474	FLIPFLOP	JB	KVRDIP 14		RECORDER	FIELD Q		/ 0		
	D	12	N.R.	72/74	AU	N.A.		6.83E 04		
5474	FLIPFLOP	JB	KVRDIP 14	81C	RECORDER	REL Q	-054C 071C	/ 0		
	D	12	N.R.	73/74	AU	TCVPC	411CY2.2G50X	9.87E 03		
5474	FLIPFLOP	JB	KVRDIP 14	81C	RECORDER	RELPR Q	-054C 071C	/ 0		
	D	12	N.R.	75/76	AU	TCVPC	139CY2.2G50X	3.33E 03		
5474	FLIPFLOP	JB	KVRDIP 14	35C	SONAR	FIELD G	025C	/ 0		
	D	12	N.R.	74/76	NSS	N.A.		1.19E 06		
5474	FLIPFLOP	JB	KVRDIP 14	35C	SONAR	REL Q	025C	/ 0		
	D	12	N.R.	74/74	NSS	EQP OP		1.72E 05		
5474	FLIPFLOP	JB	KVRDIP 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	D	12	N.R.	74/74	NSS	VIB FTG	1 AXIS	2.92E 04		
						EQP OP	025C	/ 0		
								8.76E 04		
5474	FLIPFLOP	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	D	12	N.R.	76/76	GF	N.A.		3.58E 04		
5474	FLIPFLOP	B-1	FPK 14		DIG PROC	FIELD Q		/ 0		
	D	12	N.R.	72/74	AU	N.A.		4.00E 05		
5474	FLIPFLOP	B-1	FPK 14		DIG PROC	FIELD G		/ 0		
	D	12	N.R.	74/76	AU	N.A.		2.07E 06		
5474	FLIPFLOP	B-1	DIP 14		NAVIGATE	FIELD G		/ 0		
	D	12	N.R.	74/75	AU	N.A.		6.07E 04		
5474	FLIPFLOP	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0		
	D	12	N.R.	76/76	GF	N.A.		1.39E 04		
5474	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	12	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.21E 05		
5474	FLIPFLOP	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	12	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.58E 05		
5474	FLIPFLOP	B-1	KVRDIP 14		DIG PROC	FIELD Q		/ 0		
	D	12	N.R.	72/74	AU	N.A.		3.62E 05		
5474	FLIPFLOP	B-1	KVRDIP 14	81C	DIG PROC	CHECK Q	-054C 071C	/ 0		
	D	12	N.R.	74/74	AU	TCVPC	3CY 1G 88X	1.07E 03		
5474	FLIPFLOP	B-1	KVRDIP 14	81C	DIG PROC	REL Q	-054C 071C	/ 0		
	D	12	N.R.	74/74	AU	TCVPC	707CY 1G 56X	1.43E 05		
5474	FLIPFLOP	B-1	KVRDIP 14	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
	D	12	N.R.	74/75	AU	TCVPC	368CY 1G 56X	8.45E 04		
5474	FLIPFLOP	B-1	KVRDIP 14		DISPLAY	FIELD Q		/ 0		
	D	12	N.R.	72/74	AI	N.A.		4.18E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5474	FLIPFLOP	B-1	KVRDIP 14	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	D	12	N.R.	74/75	AI	TCVPC	118CY2.2G53X	2.57E 04		
5474	FLIPFLOP	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
	D	12	N.R.	72/74	AIU	N.A.		7.53E 05		
5474	FLIPFLOP	B-1	KVRDIP 16		DIG PROC	FIELD G		/ 0		
	D	12	N.R.	74/76	AIU	N.A.		1.49E 05		
5474	FLIPFLOP	C-1	FPK 14		RADAR	FIELD G		/ 0		
	D	12	N.R.	75/76	AIU	N.A.		1.38E 06		
5474	FLIPFLOP	C-1	KVRFPK 14		RADAR	FIELD Q		/ 1	1/CATASTROPHIC	
	D	12	N.R.	72/74	AIU	N.A.		1.54E 05		
5474	FLIPFLOP	C-1	KVRFPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
	D	12	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	7.11E 03		
5474	FLIPFLOP	C-1	KVRDIP 16	30C	RADAR	REL Q	020C	/ 0		
	D	12	N.R.	76/76	GT	EQP OP		1.38E 05		
5474	FLIPFLOP	N.R.	KVRFPK 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	D	12	N.R.	74/75	AI	TCVPC	6CY 2.2G 88X	5.60E 03		
5474	FLIPFLOP	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	D	12	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	8.68E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
13474	FLIPFLOP D	NONE	KVRDIP 14	35C	COMMUNIC	FIELD G	025C	/ 0		
		12	N.R.	75/76	GM	N.A.		1.73E 03		
13474	FLIPFLOP D	NONE	KVRDIP 14	35C	COMMUNIC	REL Q	025C	/ 0		
		12	N.R.	74/75	GM	EQP OP		1.87E 03		
13474	FLIPFLOP D	NONE	KVRDIP 14	35C	COMMUNIC	RELPR Q	025C	/ 0		
		12	N.R.	75/76	GM	EQP OP		5.36E 04		
13475	LATCH BISTABLE	JB	DIP 16	35C	CONTROL	REL Q	025C	/ 0		
		24	N.R.	76/76	MGB	EQP OP		1.15E 03		
13475	LATCH BISTABLE	JB	DIP 16	35C	CONTROL	RELPR Q	025C	/ 0		
		24	N.R.	76/77	MGB	EQP OP		9.90E 03		
13475	LATCH BISTABLE	B-1	DIP 16	81C	NAVIGATE	RELPR Q	-054C 071C	/ 0		
		24	N.R.	75/76	AI	TCVPC	835CY1.6062E	2.07E 03		
13475	LATCH BISTABLE	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
		24	N.R.	72/74	AU	N.A.		2.13E 04		
13475	LATCH BISTABLE	B-1	KVRDIP 16	81C	DIG PROC	REL Q	-054C 071C	/ 0		
		24	N.R.	74/74	AU	TCVPC	707CY 1G 36E	1.91E 04		
13475	LATCH BISTABLE	B-1	KVRDIP 16	81C	DIG PROC	RELPR Q	-054C 071C	/ 0		
		24	N.R.	74/75	AU	TCVPC	368CY 1G 56E	4.97E 03		
13475	LATCH BISTABLE	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
		24	N.R.	72/74	AU	N.A.		1.36E 06		
13475	LATCH BISTABLE	B-1	KVRDIP 16		DIG PROC	FIELD G		/ 0		
		24	N.R.	74/76	AU	N.A.		2.68E 05		
13475	LATCH BISTABLE	B-1	KVRDIP 16		NAVIGATE	FIELD Q		/ 0		
		24	N.R.	72/74	AI	N.A.		1.94E 03		
13475	LATCH BISTABLE	B-1	KVRDIP 16		DISPLAY	FIELD Q		/ 0		
		24	N.R.	72/74	AI	N.A.		4.77E 04		
13475	LATCH BISTABLE	B-1	KVRDIP 16	81C	DISPLAY	REL Q	-054C 071C	/ 0		
		24	N.R.	74/75	AI	TCVPC	118CY2.2G53E	2.42E 04		
13475	LATCH BISTABLE	C-1	KVRDIP 16	30C	RADAR	REL Q	020C	/ 0		
		24	N.R.	76/76	GT	EQP OP		3.63E 04		
13475	LATCH BISTABLE	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0		
		24	N.R.	75/78	AI	N.A.		7.53E 03		
13475	LATCH BISTABLE	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0		
		24	N.R.	75/78	AU	N.A.		5.08E 03		
13475	LATCH BISTABLE	N.R.	KVRDIP 16	85C	RADAR	RELPR Q	-054C 055C	/ 0		
		24	N.R.	74/75	AU	TCVPC	8CY 2.2G 88E	3.36E 04		
13476	FLIPFLOP JK	JB	DIP 16	81C	COMMUNIC	REL G	004C 051C	/ 0		
		16	N.R.	75/75	GT	EQP OP	16CY 95E	5.41E 03		
13476	FLIPFLOP JK	JB	DIP 16	81C	DISPLAY	REL G	004C 051C	/ 0		
		16	N.R.	75/75	GT	EQP OP	18CY 95E	2.10E 03		
13476	FLIPFLOP JK	JB	DIP 16	81C	DISPLAY	REL G	004C 051C	/ 0		
		16	N.R.	75/75	GT	EQP OP	24CY 95E	6.79E 03		
13476	FLIPFLOP JK	JB	DIP 16	35C	CONTROL	RELPR Q	025C	/ 0		
		16	N.R.	76/77	MGB	EQP OP		4.95E 03		
13476	FLIPFLOP JK	JB	DIP 16		RADAR	FIELD Q		/ 0		
		16	N.R.	72/74	AU	N.A.		5.21E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5476	FLIPFLOP JK	JB 16	DIP 16 N.R.			RADAR AIU	FIELD G N.A.	/ 0 3.86E 03		
5476	FLIPFLOP JK	B-1 16	KVRDIP 16 N.R.			DIG PROC AIU	FIELD Q N.A.	/ 0 2.13E 04		
5476	FLIPFLOP JK	B-1 16	KVRDIP 16 N.R.			81C DIG PROC AIU	REL Q TCVPC	-034C 071C 707CY 1G 56E	/ 0 9.54E 03	
5476	FLIPFLOP JK	B-1 16	KVRDIP 16 N.R.			81C DIG PROC AIU	RELPR Q TCVPC	-034C 071C 368CY 1G 56E	/ 0 4.97E 03	
5476	FLIPFLOP JK	N.R. 16	KVRDIP 16 N.R.			RADAR AIU	FIELD Q N.A.	/ 0 1.94E 05		
								/ 1	1/DEGRADED	
								7.43E 05		
5476	FLIPFLOP JK	N.R. 16	KVRDIP 16 N.R.			65C RADAR AIU	RELPR Q TCVPC	-034C 055C 6CY 2.2G 88E	/ 0 1.79E 05	
								/ 7		
								4.42E 05		
5482	ADDER FULL	JB 21	FPK 14 N.R.			RADAR AIU	FIELD Q N.A.	/ 0 2.60E 03		
5482	ADDER FULL	JB 21	FPK 14 N.R.			RADAR AIU	FIELD G N.A.	/ 0 1.93E 03		
5482	ADDER FULL	JB 21	FPK 14 N.R.			35C SONAR N.SS	FIELD G N.A.	025C 7.58E 05	/ 0	
5482	ADDER FULL	JB 21	FPK 14 N.R.			35C SONAR N.SS	REL Q EQP OP	025C 1.10E 05	/ 0	
5482	ADDER FULL	JB 21	FPK 14 N.R.			SONAR N.SS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.86E 04	
							EQP OP	025C	/ 0	
								5.57E 04		
5482	ADDER FULL	JB 21	DIP 14 N.R.			61C DISPLAY GT	REL G EQP OP	004C 051C 18CY 95E	/ 0 5.88E 03	
5482	ADDER FULL	JB 21	DIP 14 N.R.			61C DISPLAY GT	REL G EQP OP	004C 051C 24CY 95E	/ 0 2.26E 03	
5482	ADDER FULL	B-1 21	KVRFPK 14 N.R.			RADAR AIU	FIELD G N.A.	/ 0 1.76E 05		
5482	ADDER FULL	C-1 21	FPK 14 N.R.			RADAR AIU	FIELD G N.A.	/ 1 2.39E 06		
5482	ADDER FULL	C-1 21	KVRFPK 14 N.R.			RADAR AIU	FIELD Q N.A.	/ 0 2.67E 05		
5482	ADDER FULL	C-1 21	KVRFPK 14 N.R.			81C RADAR AIU	REL Q TCVPC	-034C 071C 6CY 1.3G 50E	/ 0 1.23E 04	
5482	ADDER FULL	N.R. 21	KVRDIP 14 N.R.			RADAR AIU	FIELD Q N.A.	/ 0 6.70E 04		
5482	ADDER FULL	N.R. 21	KVRDIP 14 N.R.			65C RADAR AIU	RELPR Q TCVPC	-034C 055C 6CY 2.2G 88E	/ 0 1.18E 05	
5483	ADDER FULL	JB 36	FPK 16 N.R.			50C SONAR N.SS	FIELD G N.A.	025C 5.41E 04	/ 0	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRW. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5483	ADDER FULL	JB 36	YPR 16 N.R.	30C 74/74	SONAR NBS	REL Q EQP OP	023C	/ 0 7.83E 03	
5483	ADDER FULL	JB 36	YPR 16 N.R.	74/74	SONAR NBS	CHECK Q VIB PTG	28NE 1.3G 1 AXIS	/ 0 1.93E 03	
						EQP OP	023C	/ 0 3.93E 03	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	75C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 13CY1.3G 62X	/ 0 8.57E 04	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	75C 75/75	DIG PROC AI	REL Q TCVPC	-054C 050C 17CY1.3G 62X	/ 0 1.12E 05	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 2.13E 04	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	96C 74/74	DIG PROC AIU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 9.54E 03	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	96C 74/75	DIG PROC AIU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 4.97E 03	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 1.51E 03	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.97E 04	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	72/74	DISPLAY AI	FIELD Q N.A.		/ 0 1.79E 04	
5483	ADDER FULL	B-1 36	KVRDIP 16 N.R.	96C 74/75	DISPLAY AI	REL Q TCVPC	-054C 071C 118CY2.2G53X	/ 0 9.06E 03	
5483	ADDER FULL	C-1 36	KVRDIP 16 N.R.	45C 76/76	RADAR GT	REL Q EQP OP	020C	/ 0 8.06E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	35C 73/77	COMMUNIC GF	FIELD G N.A.	023C	/ 0 8.69E 06	
5486	GATE N.R.	JB 4	DIP 14 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	023C	/ 0 2.93E 04	
5486	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 3.68E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	74/75	PROCESS AIU	FIELD G N.A.		/ 0 6.83E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	023C	/ 0 1.09E 05	
5486	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 7.56E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 1.13E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	35C 76/76	CONTROL MGB	REL Q EQP OP	023C	/ 0 1.15E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	35C 76/77	CONTROL MGB	RELPR Q EQP OP	023C	/ 0 9.90E 03	
5486	GATE N.R.	JB 4	DIP 14 N.R.	77/77	RADAR AIU	REL Q EQP OP		/ 0 2.82E 04	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5486	GATE	JB	DIP 14			RECORDER: FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AU	N.A.		3.42E 04		
5486	GATE	JB	DIP 14	81C	RECORDER:	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	73/74	AU	TCVPC	411CY2.2G50X	1.97E 04		
5486	GATE	JB	DIP 14	81C	RECORDER:	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	75/76	AU	TCVPC	139CY2.2G50X	6.66E 03		
5486	GATE	B1/JB	FPK 14		PROCESS:	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AI	N.A.		4.11E 03		
5486	GATE	B1/JB	FPK 14	81C	PROCESS:	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	75/75	AI	TCVPC	310CY 1G 66X	3.59E 03		
5486	GATE	B1/JB	DIP 14		RADAR	FIELD Q		/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.		4.31E 04		
5486	GATE	B-1	FPK 14		PROCESS:	FIELD G		/ 0		
	N.R.	4	N.R.	75/76	AI	N.A.		1.32E 04		
5486	GATE	B-1	FPK 14		DIG PROC:	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AU	N.A.		6.89E 04		
5486	GATE	B-1	FPK 14		DIG PROC:	FIELD G		/ 0		
	N.R.	4	N.R.	74/76	AU	N.A.		3.55E 05		
5486	GATE	B-1	DIP 14	40C	RADAR	FIELD G	030C	/ 0		
	N.R.	4	N.R.	76/76	GF	N.A.		3.40E 05		
5486	GATE	B-1	KVRDIP 14		DIG PROC:	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AU	N.A.		2.13E 04		
5486	GATE	B-1	KVRDIP 14	81C	DIG PROC:	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AU	TCVPC	707CY 1G 56X	9.54E 03		
5486	GATE	B-1	KVRDIP 14	81C	DIG PROC:	RELPR Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AU	TCVPC	368CY 1G 56X	4.97E 03		
5486	GATE	B-1	KVRDIP 14	81C	NAVIGATE:	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	1.17E 03		
5486	GATE	B-1	KVRDIP 14	81C	NAVIGATE:	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	5.45E 03		
5486	GATE	B-1	KVRDIP 14		DISPLAY:	FIELD Q		/ 0		
	N.R.	4	N.R.	72/74	AI	N.A.		1.79E 04		
5486	GATE	B-1	KVRDIP 14	81C	DISPLAY:	REL Q	-054C 071C	/ 0		
	N.R.	4	N.R.	74/75	AI	TCVPC	118CY2.2G53X	9.06E 03		
5486	GATE	C-1	KVRDIP 14	30C	RADAR	REL Q	020C	/ 0		
	N.R.	4	N.R.	76/76	GT	EQP OP		7.26E 04		
5490	COUNTER DECADE	JB	FPK 14	35C	SONAR	FIELD G	025C	/ 0		
		15	N.R.	74/76	NSS	N.A.		3.25E 05		
5490	COUNTER DECADE	JB	FPK 14	35C	SONAR	REL Q	025C	/ 0		
		15	N.R.	74/74	NSS	EQP OP		4.70E 04		
5490	COUNTER DECADE	JB	FPK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0		
		15	N.R.	74/74	NSS	VIB FTG	1 AXIS	7.97E 03		
						EQP OP	025C	/ 0		
								2.39E 04		
5490	COUNTER DECADE	B-1	KVRDIP 14		DIG PROC:	FIELD Q		/ 0		
		15	N.R.	72/74	AU	N.A.		4.26E 04		
5490	COUNTER DECADE	B-1	KVRDIP 14	81C	DIG PROC:	RELPR Q	-054C 071C	/ 0		
		15	N.R.	74/75	AU	TCVPC	368CY 1G 56X	9.95E 03		
5490	COUNTER DECADE	B-1	KVRDIP 14		DIG PROC:	FIELD Q		/ 0		
		15	N.R.	72/74	AIU	N.A.		1.51E 05		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRM CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
5490	COUNTER DECADE	B-1 15	KVRDIP 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.97E 04			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 3.21E 04			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G81X	/ 0 2.80E 03			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 1.01E 05			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 1.03E 05			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 2.20E 04			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 9CY 2.2G 81X	/ 0 3.02E 03			
5490	COUNTER DECADE	N.R. 15	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 3.92E 04			
5492	COUNTER N.R.	B-1 26	KVRDIP 14 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 1.51E 05			
5492	COUNTER N.R.	B-1 26	KVRDIP 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 2.97E 04			
5492	COUNTER N.R.	C-1 26	KVRDIP 14 N.R.	30C 76/76	RADAR GT	REL Q EQ OP	020C	/ 0 7.39E 04			
5493	COUNTER BINARY	JB 25	FPK 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 3.25E 05			
5493	COUNTER BINARY	JB 25	FPK 14 N.R.	35C 74/74	SONAR NSS	REL Q EQ OP	025C	/ 0 4.70E 04			
5493	COUNTER BINARY	JB 25	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 6.64E 03			
						EQ OP	025C	/ 0 1.99E 04			
5493	COUNTER BINARY	JB 25	FPK 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 1.33E 03			
						EQ OP	025C	/ 0 3.98E 03			
5493	COUNTER BINARY	JB 25	DIP 14 N.R.	61C 75/75	COMMUNIC GT	REL G EQ OP	004C 051C 16CY 95X	/ 0 1.55E 03			
5493	COUNTER BINARY	JB 25	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQ OP	004C 051C 18CY 95X	/ 0 1.68E 03			
5493	COUNTER BINARY	JB 25	DIP 14 N.R.	61C 75/75	DISPLAY GT	REL G EQ OP	004C 051C 24CY 95X	/ 0 2.26E 03			
5493	COUNTER BINARY	JB 25	DIP 14 N.R.	35C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 2.16E 05			
5493	COUNTER BINARY	JB 25	DIP 14 N.R.	35C 74/74	SONAR NSS	REL Q EQ OP	025C	/ 0 3.13E 04			
5493	COUNTER BINARY	JB 25	DIP 14 N.R.	74/74	SONAR NSS	CHECK Q VIB FTG	28HZ 1.3G 1 AXIS	/ 0 5.31E 03			
						EQ OP	025C	/ 0 1.59E 04			

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5493	COUNTER BINARY	B-1 25	KVRFPK 14 N.R.	72/74	RADAR AI	FIELD Q N.A.		/ 0 7.81E 03		
5493	COUNTER BINARY	B-1 25	KVRFPK 14 N.R.	72/74	RADAR AU	FIELD Q N.A.		/ 0 2.60E 04		
5493	COUNTER BINARY	B-1 25	KVRFPK 14 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 2.51E 04		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	72/74	DIG PROC AU	FIELD Q N.A.		/ 0 1.28E 05		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	81C 74/74	DIG PROC AU	REL Q TCVPC	-054C 071C 707CY 1G 56X	/ 0 5.72E 04		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	81C 74/75	DIG PROC AU	RELPR Q TCVPC	-054C 071C 368CY 1G 56X	/ 0 2.98E 04		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	72/74	DIG PROC AIU	FIELD Q N.A.		/ 0 9.04E 05		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	74/76	DIG PROC AIU	FIELD G N.A.		/ 0 1.78E 05		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	81C 74/74	NAVIGATE AIU	REL Q TCVPC	-054C 071C 117CY 1.6G 62X	/ 0 1.17E 03		
5493	COUNTER BINARY	B-1 25	KVRDIP 14 N.R.	81C 74/75	NAVIGATE AIU	REL Q TCVPC	-054C 071C 543CY 1.6G 62X	/ 0 5.45E 03		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 3.38E 03		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	81C 73/76	RADAR AU	REL Q TCVPC	-054C 071C 10CY 2.2G 81X	/ 0 2.00E 03		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 6CY 2.2G 81X	/ 0 6.24E 04		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 7CY 2.2G 81X	/ 0 7.04E 04		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	81C 73/77	RADAR AU	REL Q TCVPC	-054C 071C 8CY 2.2G 81X	/ 0 1.48E 04		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	81C 73/74	RADAR AU	REL Q TCVPC	-054C 071C 9CY 2.2G 81X	/ 0 1.08E 03		
5493	COUNTER BINARY	N.R. 25	KVRDIP 14 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 4.76E 04		
5493	COUNTER BINARY	NONE 25	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	FIELD G N.A.	025C	/ 0 3.46E 05		
5493	COUNTER BINARY	NONE 25	KVRDIP 14 N.R.	35C 74/75	COMMUNIC GM	REL Q EQP OP	025C	/ 0 3.73E 03		
5493	COUNTER BINARY	NONE 25	KVRDIP 14 N.R.	35C 75/76	COMMUNIC GM	RELPR Q EQP OP	025C	/ 0 1.07E 05		
5495	SHIFT REG N.R.	JB 37	DIP 14 N.R.	29C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95X	/ 0 1.55E 03		
5495	SHIFT REG N.R.	JB 37	DIP 14 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95X	/ 0 1.68E 03		
5495	SHIFT REG N.R.	JB 37	DIP 14 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95X	/ 0 2.26E 03		
5495	SHIFT REG N.R.	JB 37	DIP 14 N.R.	50C 76/76	CONTROL MGB	REL Q EQP OP	025C	/ 0 1.15E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
15495	SHIFT REG	JB	DIP 14	50C	CONTROL	RELPR Q	025C	/ 0	
	N.R.	37	N.R.	76/77	IMGB	EQP OF		9.90E 03	
15495	SHIFT REG	JB	DIP 14		RADAR	REL Q		/ 0	
	N.R.	37	N.R.	77/77	AIU	EQP OF		2.90E 03	
15495	SHIFT REG	B-1	FPK 14		DIG PROC	FIELD Q		/ 0	
	N.R.	37	N.R.	72/74	IAU	N.A.		1.94E 05	
15495	SHIFT REG	B-1	FPK 14		DIG PROC	FIELD G		/ 0	
	N.R.	37	N.R.	74/76	IAU	N.A.		9.99E 05	
15495	SHIFT REG	B-1	DIP 14	96C	NAVIGATE	RELPR Q	-054C 071C	/ 0	
	N.R.	37	N.R.	75/76	AI	TCVPC	835CY1.6G62X	2.76E 05	
15495	SHIFT REG	B-1	KVRFPK 14		RADAR	FIELD Q		/ 0	
	N.R.	37	N.R.	72/74	IAU	N.A.		8.07E 04	
15495	SHIFT REG	B-1	KVRFPK 14		RADAR	FIELD G		/ 0	
	N.R.	37	N.R.	74/75	AIU	N.A.		5.98E 04	
15495	SHIFT REG	B-1	KVRDIP 14		NAVIGATE	FIELD Q		/ 0	
	N.R.	37	N.R.	72/74	AI	N.A.		2.58E 03	
15495	SHIFT REG	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	37	N.R.	75/78	IAU	N.A.		3.95E 03	
15496	SHIFT REG	JB	DIP 16		RADAR	REL Q		/ 0	
	N.R.	39	N.R.	77/77	AIU	EQP OF		8.38E 03	
15496	SHIFT REG	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0	
	N.R.	39	N.R.	72/74	IAU	N.A.		8.52E 04	
15496	SHIFT REG	B-1	KVRDIP 16	96C	DIG PROC	REL Q	-054C 071C	/ 0	
	N.R.	39	N.R.	74/74	IAU	TCVPC	707CY 1G 36X	3.81E 04	
15496	SHIFT REG	B-1	KVRDIP 16	96C	DIG PROC	RELPR Q	-054C 071C	/ 0	
	N.R.	39	N.R.	74/75	IAU	TCVPC	368CY 1G 36X	1.99E 04	
15496	SHIFT REG	B-1	KVRDIP 16		RADAR	FIELD Q		/ 0	
	N.R.	39	N.R.	72/74	IAU	N.A.		1.56E 04	
15496	SHIFT REG	B-1	KVRDIP 16		RADAR	FIELD G		/ 0	
	N.R.	39	N.R.	74/75	AIU	N.A.		1.16E 04	
15497	MULTIPLIER	B-1	DIP 16	50C	DISPLAY	FIELD Q	025C	/ 0	
	BINARY	54	N.R.	75/76	IGT	N.A.		5.99E 04	
15497	MULTIPLIER	B-1	DIP 16	55C	RADAR	FIELD G	030C	/ 0	
	BINARY	54	N.R.	76/76	IGF	N.A.		1.11E 05	
7093	BUFFER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	6.01E 04	
7093	BUFFER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	7.85E 04	
7094	BUFFER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	2.97E 04	
7094	BUFFER	B-1	KVRDIP 14	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	4	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	3.88E 04	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7121	MULTIPLEXER	B-1	KVRDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	17	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	8.96E 03	
7121	MULTIPLEXER	B-1	KVRDIP 16	60C	DIG PROC	REL Q	-054C 050C	/ 0	
	N.R.	17	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.17E 04	
7400	GATE	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	76/78	GBC	N.A.		6.53E 03	
7400	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	76/78	GBC	N.A.		4.03E 05	
7402	GATE	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	76/78	GBC	N.A.		1.91E 03	
7404	INVERTER	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	6	N.R.	76/78	GBC	N.A.		4.59E 03	
7404	INVERTER	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	6	N.R.	76/78	GBC	N.A.		5.98E 03	
7408	GATE	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	76/78	GBC	N.A.		3.83E 05	
7408	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	76/78	GBC	N.A.		4.34E 05	
7408	GATE	NONE	DIP 14	30C	COMB/NOC	FIELD U	020C	/ 0	
	N.R.	4	N.R.	76/77	GBC	N.A.		3.93E 04	
7410	GATE	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	76/78	GBC	N.A.		1.91E 05	
7410	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	3	N.R.	76/78	GBC	N.A.		2.02E 05	
74123	FLIPFLOP MONOSTABLE	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
		20	N.R.	76/78	GBC	N.A.		1.94E 05	
74123	FLIPFLOP MONOSTABLE	NONE	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
		20	N.R.	76/78	GBC	N.A.		2.02E 05	
74125	BUFFER	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	4	N.R.	76/78	GBC	N.A.		1.01E 05	
74153	MULTIPLEXER	NONE	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	16	N.R.	76/78	GBC	N.A.		2.02E 05	
74155	DECODE/DEMUX	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	15	N.R.	76/78	GBC	N.A.		1.91E 05	
74157	MULTIPLEXER	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	15	N.R.	76/78	GBC	N.A.		5.74E 05	
74173	FLIPFLOP D	NONE	DIP 16	45C	COMB/NOC	FIELD U	020C	/ 1	1/CATASTROPHIC
		45	N.R.	76/77	GBC	N.A.		7.86E 04	
74175	FLIPFLOP D	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
		24	N.R.	76/78	GBC	N.A.		1.91E 05	
74175	FLIPFLOP D	NONE	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0	
		24	N.R.	76/78	GBC	N.A.		4.77E 04	
				76/78				/ 1	
								3.02E 05	
7420	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	2	N.R.	76/78	GBC	N.A.		1.01E 05	
7425	GATE	NONE	DIP 14	50C	DISPLAY	FIELD U	040C 55XFWR	/ 11	
	N.R.	2	N.R.	75/77	GBC	N.A.		4.49E 07	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7427	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	3	N.R.	76/78	GBC	N.A.		1.66E 04		
7430	GATE	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	1	N.R.	76/78	GBC	N.A.		1.91E 05		
7432	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	4	N.R.	76/78	GBC	N.A.		3.02E 05		
7433	BUFFER	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	4	N.R.	76/78	GBC	N.A.		1.66E 04		
7437	BUFFER	NONE	DIP 14	30C	COMB/NOC	FIELD U	020C	/ 0		
	N.R.	4	N.R.	76/77	GBC	N.A.		3.93E 04		
7438	BUFFER	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	4	N.R.	76/78	GBC	N.A.		3.33E 05		
7442	DECODER	NONE	DIP 16	30C	COMB/NOC	FIELD U	020C	/ 0		
	BCD/DECIMAL	18	N.R.	76/77	GBC	N.A.		3.93E 04		
7451	GATE	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	N.R.	6	N.R.	76/78	GBC	N.A.		2.02E 05		
7474	FLIPFLOP	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	D	12	N.R.	76/78	GBC	N.A.		1.34E 06		
7474	FLIPFLOP	NONE	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	D	12	N.R.	76/78	GBC	N.A.		7.37E 05		
				76/78				/ 1		
								3.11E 04		
7475	LATCH	N.R.	DIP 16	35C	DIG PROC	FIELD U	025C	/ 0		
	BISTABLE	24	N.R.	76/78	GBC	N.A.		1.39E 06		
7483	ADDER	N.R.	DIP 16	50C	DIG PROC	FIELD U	025C	/ 0		
	FULL	36	N.R.	76/78	GBC	N.A.		9.92E 04		
7493	COUNTER	N.R.	DIP 14	35C	DIG PROC	FIELD U	025C	/ 0		
	BINARY	25	N.R.	76/78	GBC	N.A.		3.90E 05		
7551	FLIPFLOP	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	45	N.R.	75/75	AI	TCVPC	13CY1.3G 62X	1.10E 05		
7551	FLIPFLOP	B-1	KVRDIP 16	75C	DIG PROC	REL Q	-054C 050C	/ 0		
	D	45	N.R.	75/75	AI	TCVPC	17CY1.3G 62X	1.44E 05		
8200	SHIFT REG	C-1	FPK 24		RADAR	FIELD Q		/ 0		
	N.R.	62	N.R.	72/74	AIU	N.A.		1.11E 05		
8200	SHIFT REG	C-1	FPK 24		RADAR	FIELD G		/ 0		
	N.R.	62	N.R.	75/76	AIU	N.A.		9.94E 05		
8200	SHIFT REG	C-1	FPK 24	96C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	62	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.13E 03		
8202	SHIFT REG	C-1	FPK 24		RADAR	FIELD Q		/ 0		
	N.R.	66	N.R.	72/74	AIU	N.A.		3.79E 05		
8202	SHIFT REG	C-1	FPK 24		RADAR	FIELD G		/ 1		
	N.R.	66	N.R.	75/76	AIU	N.A.		3.38E 06		
8202	SHIFT REG	C-1	FPK 24	96C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	66	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	1.75E 04		
8233	MULTIPLEXER	B-1	KVRFPK 16	35C	SONAR	FIELD G	025C	/ 0		
	N.R.	14	N.R.	74/76	NSS	N.A.		5.41E 04		
8233	MULTIPLEXER	B-1	KVRFPK 16	35C	SONAR	REL Q	025C	/ 0		
	N.R.	14	N.R.	74/74	NSS	EQP OP		7.83E 03		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. ° TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8233	MULTIPLEXER	B-1	KVRFFK 16		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	14	N.R.	74/74	NSS	VID FTG	1 AXIS	1.33E 03	
						EQP OP	025C	/ 0	
								3.98E 03	
8233	MULTIPLEXER	C-1	FPK 16		RADAR	FIELD G		/ 0	
	N.R.	14	N.R.	75/76	AIU	N.A.		1.97E 06	
8241	GATE	B-1	KVRFFK 16		RADAR	FIELD G		/ 0	
	N.R.	20	N.R.	74/75	AIU	N.A.		6.93E 04	
8241	GATE	C-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	20	N.R.	75/76	AIU	N.A.		1.03E 06	
8241	GATE	C-1	KVRFFK 16		RADAR	FIELD Q		/ 0	
	N.R.	20	N.R.	72/74	AIU	N.A.		1.15E 05	
8241	GATE	C-1	KVRFFK 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	20	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.31E 03	
8242	GATE	B-1	KVRFFK 14	35C	SONAR	FIELD G	025C	/ 0	
	N.R.	20	N.R.	74/76	NSS	N.A.		1.09E 06	
8242	GATE	B-1	KVRFFK 14	35C	SONAR	REL Q	025C	/ 0	
	N.R.	20	N.R.	74/74	NSS	EQP OP		1.49E 05	
8242	GATE	B-1	KVRFFK 14		SONAR	CHECK Q	28HZ 1.3G	/ 0	
	N.R.	20	N.R.	74/74	NSS	VID FTG	1 AXIS	2.52E 04	
						EQP OP	025C	/ 0	
								7.57E 04	
8242	GATE	N.R.	KVRFFK 14	35C	DIG PROC	FIELD U	025C	/ 0	
	N.R.	20	N.R.	76/78	GBC	N.A.		1.94E 05	
8252/9301	DECODER	JB	DIP 16	35C	CONTROL	REL Q	025C	/ 0	
	BCD/DECIMAL	18	N.R.	76/76	MGB	EQP OP		4.61E 03	
8252/9301	DECODER	JB	DIP 16	35C	CONTROL	RELPR Q	025C	/ 0	
	BCD/DECIMAL	18	N.R.	76/77	MGB	EQP OP		3.96E 04	
8260	LOGIC UNIT	NONE	DIP 24	50C	DIG PROC	FIELD U	025C	/ 0	
	ARITHMETIC	56	N.R.	76/78	GBC	N.A.		2.15E 05	
8261	GATE	C-1	FPK 14		RADAR	FIELD Q		/ 0	
	N.R.	9	N.R.	72/74	AIU	N.A.		6.36E 03	
8263	MULTIPLEXER	C-1	FPK 24		RADAR	FIELD G		/ 0	
	N.R.	34	N.R.	75/76	AIU	N.A.		7.15E 05	
8284	COUNTER	B-1	KVRFFK 14		RADAR	FIELD G		/ 0	
	N.R.	48	N.R.	74/75	AIU	N.A.		8.80E 04	
8284	COUNTER	C-1	FPK 14		RADAR	FIELD G		/ 0	
	N.R.	48	N.R.	75/76	AIU	N.A.		1.14E 06	
8284	COUNTER	C-1	KVRFFK 14		RADAR	FIELD Q		/ 0	
	N.R.	48	N.R.	72/74	AIU	N.A.		1.29E 05	
8284	COUNTER	C-1	KVRFFK 14	96C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	48	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.76E 03	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9016	INVERTER	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	75/78	AI	N.A.		1.71E 04	
9016	INVERTER	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0	
	N.R.	6	N.R.	74/75	AI	TCVPC	6CY 2.2G 88X	1.40E 04	
9016	INVERTER	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	75/78	AU	N.A.		1.02E 06	
				75/78				/ 2	1/DEGRADED
								7.45E 04	1/ OPEN
9016	INVERTER	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0	
	N.R.	6	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	6.61E 05	
9024	FLIPFLOP	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	JK		N.R.	74/75	AIU	N.A.		3.18E 05	
9024	FLIPFLOP	C-1	FPK 16		RADAR	FIELD G		/ 0	
	JK		N.R.	75/76	AIU	N.A.		3.49E 04	
9024	FLIPFLOP	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	JK		N.R.	72/74	AIU	N.A.		3.77E 05	
9024	FLIPFLOP	C-1	KVRFPK 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	JK		N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	1.58E 04	
9300	SHIFT REG	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	N.R.	48	N.R.	74/75	AIU	N.A.		3.73E 05	
9300	SHIFT REG	C-1	FPK 16		RADAR	FIELD G		/ 0	
	N.R.	40	N.R.	75/76	AIU	N.A.		2.01E 06	
9300	SHIFT REG	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	N.R.	48	N.R.	72/74	AIU	N.A.		4.07E 05	
9300	SHIFT REG	C-1	KVRFPK 16	96C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	48	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	1.81E 04	
9300	SHIFT REG	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0	
	N.R.	48	N.R.	75/78	AU	N.A.		5.40E 05	
				75/78				/ 1	1/DEGRADED
								4.08E 04	
9300	SHIFT REG	N.R.	KVRDIP 16	80C	RADAR	RELPR Q	-054C 055C	/ 0	
	N.R.	48	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	3.1E 05	
				74/75				/ 5	
								1.90E 05	
9301	DECODER	B-1	DIP 16	35C	COMMUNIC	FIELD Q	025C	/ 0	
	BCD/DECIMAL	18	N.R.	75/76	GT	N.A.		9.89E 04	
9301	DECODER	B-1	DIP 16	35C	DISPLAY	FIELD Q	025C	/ 0	
	BCD/DECIMAL	18	N.R.	75/76	GT	N.A.		4.06E 05	
9301	DECODER	B-1	DIP 16	40C	RADAR	FIELD G	030C	/ 0	
	BCD/DECIMAL	18	N.R.	76/76	GF	N.A.		3.06E 06	
9301	DECODER	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	BCD/DECIMAL	18	N.R.	74/75	AIU	N.A.		1.05E 05	
9301	DECODER	C-1	FPK 16		RADAR	FIELD G		/ 0	
	BCD/DECIMAL	18	N.R.	75/76	AIU	N.A.		5.00E 05	
9301	DECODER	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	BCD/DECIMAL	18	N.R.	72/74	AIU	N.A.		1.26E 05	
9301	DECODER	C-1	KVRFPK 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	BCD/DECIMAL	18	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.49E 03	
9301	DECODER	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0	
	BCD/DECIMAL	18	N.R.	75/78	AU	N.A.		3.13E 05	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9016	INVERTER	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	75/78	AI	N.A.		1.71E 04	
9016	INVERTER	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0	
	N.R.	6	N.R.	74/75	AI	TCVPC	6CY 2.2G 88X	1.40E 04	
9016	INVERTER	N.R.	KVRDIP 14		RADAR	FIELD Q		/ 0	
	N.R.	6	N.R.	75/78	AU	N.A.		1.02E 06	
				75/78				/ 2	1/DEGRADED
								7.45E 04	1/ OPEN
9016	INVERTER	N.R.	KVRDIP 14	65C	RADAR	RELPR Q	-054C 055C	/ 0	
	N.R.	6	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	6.61E 05	
9024	FLIPFLOP	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	JK		N.R.	74/75	AIU	N.A.		3.18E 05	
9024	FLIPFLOP	C-1	FPK 16		RADAR	FIELD G		/ 0	
	JK		N.R.	75/76	AIU	N.A.		3.49E 04	
9024	FLIPFLOP	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	JK		N.R.	72/74	AIU	N.A.		3.77E 05	
9024	FLIPFLOP	C-1	KVRFPK 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	JK		N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	1.58E 04	
9300	SHIFT REG	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	N.R.	48	N.R.	74/75	AIU	N.A.		3.73E 05	
9300	SHIFT REG	C-1	FPK 16		RADAR	FIELD G		/ 0	
	N.R.	40	N.R.	75/76	AIU	N.A.		2.01E 06	
9300	SHIFT REG	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	N.R.	48	N.R.	72/74	AIU	N.A.		4.07E 05	
9300	SHIFT REG	C-1	KVRFPK 16	96C	RADAR	REL Q	-054C 071C	/ 0	
	N.R.	48	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	1.81E 04	
9300	SHIFT REG	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0	
	N.R.	48	N.R.	75/78	AU	N.A.		5.40E 05	
				75/78				/ 1	1/DEGRADED
								6.08E 04	
9300	SHIFT REG	N.R.	KVRDIP 16	80C	RADAR	RELPR Q	-054C 055C	/ 0	
	N.R.	48	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	3.00E 05	
				74/75				/ 5	
								1.90E 05	
9301	DECODER	B-1	DIP 16	35C	COMMUNIC	FIELD Q	025C	/ 0	
	BCD/DECIMAL	18	N.R.	75/76	GT	N.A.		9.89E 04	
9301	DECODER	B-1	DIP 16	35C	DISPLAY	FIELD Q	025C	/ 0	
	BCD/DECIMAL	18	N.R.	75/76	GT	N.A.		4.06E 05	
9301	DECODER	B-1	DIP 16	40C	RADAR	FIELD G	030C	/ 0	
	BCD/DECIMAL	18	N.R.	76/76	GF	N.A.		3.06E 06	
9301	DECODER	B-1	KVRFPK 16		RADAR	FIELD G		/ 0	
	BCD/DECIMAL	18	N.R.	74/75	AIU	N.A.		1.05E 05	
9301	DECODER	C-1	FPK 16		RADAR	FIELD G		/ 0	
	BCD/DECIMAL	18	N.R.	75/76	AIU	N.A.		5.00E 05	
9301	DECODER	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0	
	BCD/DECIMAL	18	N.R.	72/74	AIU	N.A.		1.26E 05	
9301	DECODER	C-1	KVRFPK 16	81C	RADAR	REL Q	-054C 071C	/ 0	
	BCD/DECIMAL	18	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	5.49E 03	
9301	DECODER	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0	
	BCD/DECIMAL	18	N.R.	75/78	AU	N.A.		3.13E 05	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9301	DECODER	N.R.	KVRDIP 16	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	BCD/DECIMAL	18	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	1.60E 05		
9304	ADDER	JB	KVRDIP 16	35C	COMMUNIC	FIELD G	025C	/ 0		
	FULL	22	N.R.	73/77	GF	N.A.		5.14E 06		
9309	MULTIPLEXER	JB	DIP 16	61C	COMMUNIC	REL G	004C 051C	/ 0		
	N.R.	16	N.R.	75/75	GT	EQP OP	16CY 95X	1.55E 03		
9309	MULTIPLEXER	JB	DIP 16	35C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	16	N.R.	75/76	GT	N.A.		9.47E 04		
9309	MULTIPLEXER	JB	DIP 16	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	16	N.R.	75/75	GT	EQP OP	18CY 95X	1.01E 04		
9309	MULTIPLEXER	JB	DIP 16	61C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	16	N.R.	75/75	GT	EQP OP	24CY 95X	2.26E 03		
9309	MULTIPLEXER	JB	DIP 16	35C	CONTROL	RELPR Q	025C	/ 0		
	N.R.	16	N.R.	76/77	MGB	EQP OP		2.48E 03		
9309	MULTIPLEXER	JB	DIP 16		RADAR	REL Q		/ 0		
	N.R.	16	N.R.	77/77	AIU	EQP OP		4.83E 04		
9309	MULTIPLEXER	B-1	KVRFPK 16		RADAR	FIELD G		/ 0		
	N.R.	16	N.R.	74/75	AIU	N.A.		3.86E 05		
9309	MULTIPLEXER	C-1	FPK 16		RADAR	FIELD G		/ 0		
	N.R.	16	N.R.	75/76	AIU	N.A.		2.97E 06		
9309	MULTIPLEXER	C-1	KVRFPK 16		RADAR	FIELD Q		/ 0		
	N.R.	16	N.R.	72/74	AIU	N.A.		5.02E 05		
9309	MULTIPLEXER	C-1	KVRFPK 16	81C	RADAR	REL Q	-054C 071C	/ 0		
	N.R.	16	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	2.25E 04		
9309	MULTIPLEXER	N.R.	KVRDIP 16		RADAR	FIELD Q		/ 0		
	N.R.	16	N.R.	75/78	AU	N.A.		8.04E 04		
9309	MULTIPLEXER	N.R.	KVRDIP 16	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	16	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	3.08E 04		
9310	COUNTER	JB	DIP 16	50C	DISPLAY	FIELD Q	025C	/ 0		
	N.R.	60	N.R.	75/76	GT	N.A.		4.74E 04		
9310	COUNTER	JB	DIP 16	29C	DISPLAY	REL G	004C 051C	/ 0		
	N.R.	60	N.R.	75/75	GT	EQP OP	18CY 95X	4.20E 03		
9311	DECODE/DEMUX	B-1	KVRFPK 24	35C	SONAR	FIELD G	025C	/ 0		
	N.R.	25	N.R.	74/76	NSS	N.A.		5.41E 04		
9311	DECODE/DEMUX	B-1	KVRFPK 24	35C	SONAR	REL Q	025C	/ 0		
	N.R.	25	N.R.	74/74	NSS	EQP OP		7.83E 03		
9311	DECODE/DEMUX	B-1	KVRFPK 24		SONAR	CHECK Q	28HZ 1.3G	/ 0		
	N.R.	25	N.R.	74/74	NSS	VIB FTG	1 AXIS	1.33E 03		
						EQP OP	025C	/ 0		
								3.98E 03		
9311	DECODE/DEMUX	N.R.	KVRFPK 24	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	25	N.R.	74/75	AI	TCVPC	6CY 2.2G 88X	5.60E 03		
9311	DECODE/DEMUX	N.R.	KVRDIP 24		RADAR	FIELD Q		/ 0		
	N.R.	25	N.R.	75/78	AI	N.A.		7.33E 03		
9311	DECODE/DEMUX	N.R.	KVRDIP 24		RADAR	FIELD Q		/ 0		
	N.R.	25	N.R.	75/78	AU	N.A.		6.94E 03		
9311	DECODE/DEMUX	N.R.	KVRDIP 24	65C	RADAR	RELPR Q	-054C 055C	/ 0		
	N.R.	25	N.R.	74/75	AU	TCVPC	6CY 2.2G 88X	1.12E 04		
9312	MULTIPLEXER	JB	DIP 16	35C	COMMUNIC	FIELD Q	025C	/ 0		
	N.R.	17	N.R.	75/76	GT	N.A.		2.93E 04		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
9312	MULTIPLEXER N.R.	JB 17	DIP 16 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95%	/ 0 5.41E 03			
9312	MULTIPLEXER N.R.	JB 17	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 1.01E 06			
9312	MULTIPLEXER N.R.	JB 17	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95%	/ 0 6.85E 04			
9312	MULTIPLEXER N.R.	JB 17	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95%	/ 0 1.30E 04			
9312	MULTIPLEXER N.R.	JB 17	DIP 16 N.R.	77/77	RADAR AIU	REL Q EQP OP		/ 0 5.14E 04			
9312	MULTIPLEXER N.R.	B-1 17	KVRFPK 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 4.27E 05			
9312	MULTIPLEXER N.R.	C-1 17	FPK 16 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 3.05E 06			
9312	MULTIPLEXER N.R.	C-1 17	KVRFPK 16 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 6.17E 05			
9312	MULTIPLEXER N.R.	C-1 17	KVRFPK 16 N.R.	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50%	/ 0 2.74E 04			
9312	MULTIPLEXER N.R.	N.R. 17	KVRDIP 16 N.R.	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88%	/ 0 5.60E 03			
9314	LATCH N.R.	JB 26	DIP 16 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 8.06E 04			
9314	LATCH N.R.	JB 26	DIP 16 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95%	/ 0 2.70E 04			
9314	LATCH N.R.	JB 26	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 5.44E 05			
9314	LATCH N.R.	JB 26	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95%	/ 0 3.57E 04			
9314	LATCH N.R.	JB 26	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95%	/ 0 2.49E 04			
9314	LATCH N.R.	B-1 26	FPK 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 3.75E 03			
9314	LATCH N.R.	B-1 26	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 1.10E 05			
9314	LATCH N.R.	C-1 26	FPK 16 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 3.67E 03			
9314	LATCH N.R.	C-1 26	FPK 16 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 2.25E 04			
9316	COUNTER BINARY	JB 57	DIP 16 N.R.	50C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 3.66E 04			
9316	COUNTER BINARY	JB 57	DIP 16 N.R.	29C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95%	/ 0 5.41E 03			
9316	COUNTER BINARY	JB 57	DIP 16 N.R.	50C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 6.31E 05			
9316	COUNTER BINARY	JB 57	DIP 16 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 95%	/ 0 5.17E 04			
9316	COUNTER BINARY	JB 57	DIP 16 N.R.	29C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 24CY 95%	/ 0 7.92E 03			
9316	COUNTER BINARY	B-1 57	KVRFPK 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 4.03E 05			

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
19316	COUNTER BINARY	B-1 57	KVRFPK 16 N.R.	50C 74/76	SONAR NSS	FIELD G N.A.	025C	/ 0 2.16E 06	
19316	COUNTER BINARY	B-1 57	KVRFPK 16 N.R.	50C 74/74	SONAR NSS	REL Q EQP OP	025C	/ 0 3.13E 05	
19316	COUNTER BINARY	B-1 57	KVRFPK 16 N.R.	50C 74/74	SONAR NSS	CHECK Q VIB PTC	28HZ 1.30 1 AXIS	/ 0 5.31E 04	
						EQP OP	025C	/ 0 1.59E 05	
19316	COUNTER BINARY	C-1 57	FPK 16 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 2.49E 06	
19316	COUNTER BINARY	C-1 57	KVRFPK 16 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 5.46E 05	
19316	COUNTER BINARY	C-1 57	KVRFPK 16 N.R.	96C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.30 50E	/ 0 2.42E 04	
19316	COUNTER BINARY	N.R. 57	KVRFPK 16 N.R.	75/78	RADAR AI	FIELD Q N.A.		/ 0 7.53E 05	
19316	COUNTER BINARY	N.R. 57	KVRFPK 16 N.R.	80C 74/75	RADAR AI	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88E	/ 0 1.40E 04	
19316	COUNTER BINARY	N.R. 57	KVRDIP 16 N.R.	75/78	RADAR AU	FIELD Q N.A.		/ 0 7.19E 05	
19316	COUNTER BINARY	N.R. 57	KVRDIP 16 N.R.	80C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88E	/ 0 1.40E 04	
				74/75				/ 1 1.06E 05	
				74/75				/ 11 2.66E 05	
19318	ENCODER N.R.	B-1 24	DIP 16 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 3.30E 04	
19318	ENCODER N.R.	B-1 24	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 3.61E 04	
19318	ENCODER N.R.	B-1 24	DIP 16 N.R.	40C 76/76	RADAR GF	FIELD G N.A.	030C	/ 0 3.81E 05	
19318	ENCODER N.R.	B-1 24	KVRFPK 16 N.R.	74/75	RADAR AIU	FIELD G N.A.		/ 0 1.12E 04	
19318	ENCODER N.R.	C-1 24	FPK 16 N.R.	75/76	RADAR AIU	FIELD G N.A.		/ 0 1.74E 04	
19318	ENCODER N.R.	C-1 24	KVRFPK 16 N.R.	72/74	RADAR AIU	FIELD Q N.A.		/ 0 1.26E 04	
19321	DECODER N.R.	NONE 18	DIP 16 N.R.	95C 76/77	NA NA	LIFE V HUMLIFE	085C 85ERR	73/ 0 1.46E 05	
						EM		73/ 1	1/DEGRADED
								0.	
19322	MULTIPLEXER N.R.	JB 19	DIP 16 N.R.	35C 75/76	COMMUNIC GT	FIELD Q N.A.	025C	/ 0 8.91E 04	
19322	MULTIPLEXER N.R.	JB 19	DIP 16 N.R.	61C 75/75	COMMUNIC GT	REL G EQP OP	004C 051C 16CY 95E	/ 0 4.64E 03	
19322	MULTIPLEXER N.R.	JB 19	DIP 16 N.R.	35C 75/76	DISPLAY GT	FIELD Q N.A.	025C	/ 0 9.56E 05	
19322	MULTIPLEXER N.R.	JB 19	DIP 16 N.R.	61C 75/75	DISPLAY GT	REL G EQP OP	004C 051C 18CY 93E	/ 0 7.60E 04	

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VARIANTS		MANUFACTURER				RELIABILITY ANALYSIS CENTER					
TYPE		OPERATIONAL TYPE									
PART NO.	DEVICE	SCRN. CLASS	PACKAGE / PINS	JCT. # TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED / #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
9322	MULTIPLEXER	JB	DIP 16	61C	DISPLAY	REL G	004C 051C	/ 0			
	N.R.	19	N.R.	75/75	GT	EQP OP	24CY 95X	2.04E 04			
9322	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0			
	N.R.	19	N.R.	72/74	AIU	N.A.		3.01E 05			
9322	MULTIPLEXER	B-1	KVRDIP 16		DIG PROC	FIELD G		/ 0			
	N.R.	19	N.R.	74/76	AIU	N.A.		5.95E 04			
9322	MULTIPLEXER	B-1	KVRDIP 16		DISPLAY	FIELD Q		/ 0			
	N.R.	19	N.R.	72/74	AI	N.A.		4.47E 04			
9322	MULTIPLEXER	B-1	KVRDIP 16	81C	DISPLAY	REL Q	-054C 071C	/ 0			
	N.R.	19	N.R.	74/75	AI	TCVPC	118CY 2.2G 53X	2.27E 04			
9322	MULTIPLEXER	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	19	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	1.42E 04			
9322	MULTIPLEXER	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	19	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	1.41E 04			
9322	MULTIPLEXER	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	19	N.R.	73/76	AU	TCVPC	8CY 2.2G 81X	2.24E 03			
9328	SHIFT REG	B-1	KVRFPK 16		RADAR	FIELD G		/ 1		1/CATASTROPHIC	
	N.R.	72	N.R.	74/75	AIU	N.A.		2.87E 05			
9328	SHIFT REG	C-1	FPK 16		RADAR	FIELD G		/ 5			
	N.R.	72	N.R.	75/76	AIU	N.A.		4.24E 06			
9328	SHIFT REG	C-1	KVRFPK 16		RADAR	FIELD Q		/ 1		1/CATASTROPHIC	
	N.R.	72	N.R.	72/74	AIU	N.A.		4.74E 05			
9328	SHIFT REG	C-1	KVRFPK 16	96C	RADAR	REL Q	-054C 071C	/ 0			
	N.R.	72	N.R.	74/74	AIU	TCVPC	6CY 1.3G 50X	2.19E 04			
9334	LATCH ADDRESSABLE	NONE	DIP 16	50C	DIG PROC	FIELD U	025C	/ 0			
		59	N.R.	76/78	GBC	N.A.		1.34E 05			
9600	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0			
		11	N.R.	73/76	AU	TCVPC	10CY 2.2G 81X	1.20E 03			
9600	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0			
		11	N.R.	73/76	AU	TCVPC	6CY 071C	1.25E 04			
9600	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0			
		11	N.R.	76/77	AU	TCVPC	6CY 2.2G 81X	3.01E 04			
9600	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0			
		11	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	4.42E 04			
9600	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	81C	RADAR	REL Q	-054C 071C	/ 0			
		11	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	9.41E 03			
9601	FLIPFLOP MONOSTABLE	JB	DIP 14	35C	CONTROL	RELPR Q	025C	/ 0			
		8	N.R.	76/77	MGB	EQP OP		4.95E 03			
9601	FLIPFLOP MONOSTABLE	B-1	FPK 14		DIG PROC	FIELD Q		/ 0			
		8	N.R.	72/74	AU	N.A.		4.31E 03			
9601	FLIPFLOP MONOSTABLE	B-1	FPK 14		DIG PROC	FIELD G		/ 0			
		8	N.R.	74/76	AU	N.A.		2.22E 04			
9601	FLIPFLOP MONOSTABLE	B-1	KVRFPK 14	35C	DIG PROC	CHECK Q	025C	/ 0			
		8	N.R.	73/75	AI	EQP OP		9.58E 05			
9601	FLIPFLOP MONOSTABLE	B-1	KVRFPK 14	64C	DIG PROC	REL Q	-069C 054C	/ 0			
		8	N.R.	75/75	AI	TCVPC	14CY .71G 62X	8.16E 03			
9601	FLIPFLOP MONOSTABLE	B-1	KVRFPK 14	81C	DIG PROC	REL Q	-054C 071C	/ 0			
		8	N.R.	74	AU	TCVPC	178CY 1.2G 65X	4.28E 03			
9601	FLIPFLOP MONOSTABLE	B-1	KVRFPK 14		RADAR	FIELD G		/ 0			
		8	N.R.	74/75	AIU	N.A.		5.43E 04			

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRW. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO.	CHIP GATES	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9601	FLIPFLOP MONOSTABLE	C-1	PPK 14	75/76	RADAR	FIELD G		/ 0		
		8	N.R.		AIU	N.A.		1.76E 05		
9601	FLIPFLOP MONOSTABLE	C-1	KVRFPK 14	72/74	RADAR	FIELD Q		/ 0		
		8	N.R.		AIU	N.A.		5.79E 04		
9601	FLIPFLOP MONOSTABLE	C-1	KVRFPK 14	81C 74/74	RADAR AIU	REL Q TCVPC	-054C 071C 6CY 1.3G 50X	/ 1 1.40E 04	1/DEGRADED	
9601	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	75/78	RADAR	FIELD Q		/ 0		
		8	N.R.		AI	N.A.		6.52E 04		
9601	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	65C 74/75	RADAR AI	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 3.92E 04		
9601	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	75/78	RADAR	FIELD Q		/ 0		
		8	N.R.		AU	N.A.		1.49E 05		
				75/78				/ 1	1/DEGRADED	
								1.63E 04		
9601	FLIPFLOP MONOSTABLE	N.R.	KVRDIP 14	65C 74/75	RADAR AU	RELPR Q TCVPC	-054C 055C 6CY 2.2G 88X	/ 0 2.21E 05		
9602	FLIPFLOP MONOSTABLE	B-1	PPK 16	74/75	RADAR	FIELD G		/ 0		
		14	N.R.		AIU	N.A.		9.37E 03		
9602	FLIPFLOP MONOSTABLE	B-1	PPK 16	35C 74/76	SONAR	FIELD G	025C	/ 0		
		14	N.R.		NSS	N.A.		2.16E 05		
9602	FLIPFLOP MONOSTABLE	B-1	PPK 16	35C 74/74	SONAR	REL Q	025C	/ 0		
		14	N.R.		NSS	EQP OP		3.13E 04		
9602	FLIPFLOP MONOSTABLE	B-1	PPK 16	74/74	SONAR	CHECK Q	28HZ 1.3G	/ 0		
		14	N.R.		NSS	VIB FTG	1 AXIS	5.31E 03		
						EQP OP	025C	/ 0		
								1.59E 04		
9602	FLIPFLOP MONOSTABLE	B-1	DIP 16	35C 75/76	COMMUNIC	FIELD Q	025C	/ 0		
		14	N.R.		GT	N.A.		5.86E 04		
9602	FLIPFLOP MONOSTABLE	B-1	DIP 16	35C 75/76	DISPLAY	FIELD Q	025C	/ 0		
		14	N.R.		GT	N.A.		8.95E 04		
9602	FLIPFLOP MONOSTABLE	B-1	KVRDIP 16	75/76	DIG PROC	FIELD G		/ 0		
		14	N.R.		AIU	N.A.		3.66E 04		

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
19602	FLIPFLOP	B-1	KVRDIP 16	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	MONOSTABLE	14	N.R.	74/74	AIU	TCVPC	117CY1.6G62X	3.51E 03		
19602	FLIPFLOP	B-1	KVRDIP 16	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	MONOSTABLE	14	N.R.	74/75	AIU	TCVPC	545CY1.6G62X	1.64E 04		
19602	FLIPFLOP	B-1	KVRDIP 16	81C	NAVIGATE	REL Q	-054C 071C	/ 0		
	MONOSTABLE	14	N.R.	73/74	AIU	TCVPC	62CY 1.6G62X	1.86E 03		
19602	FLIPFLOP	B-1	KVRDIP 16		DIG PROC	FIELD Q		/ 0		
	MONOSTABLE	18	N.R.	72/74	AIU	N.A.		2.26E 05		
19602	FLIPFLOP	B-1	KVRDIP 16		DIG PROC	FIELD G		/ 0		
	MONOSTABLE	18	N.R.	74/75	AIU	N.A.		8.04E 03		
19602	FLIPFLOP	B-1	KVRDIP 16		NAVIGATE	FIELD G		/ 0		
	MONOSTABLE	18	N.R.	74/75	AU	N.A.		2.64E 03		
19602	FLIPFLOP	B-1	KVRDIP 16		DISPLAY	FIELD Q		/ 0		
	MONOSTABLE	18	N.R.	72/74	AI	N.A.		5.97E 03		
19602	FLIPFLOP	B-1	KVRDIP 16	81C	DISPLAY	REL Q	-054C 071C	/ 0		
	MONOSTABLE	18	N.R.	74/75	AI	TCVPC	118CY2.2G53X	3.02E 03		
19602	FLIPFLOP	C-1	FPK 16		RADAR	FIELD Q		/ 0		
	MONOSTABLE	14	N.R.	72/74	AIU	N.A.		9.18E 03		
19602	FLIPFLOP	C-1	FPK 16		RADAR	FIELD G		/ 0		
	MONOSTABLE	14	N.R.	75/76	AIU	N.A.		5.63E 04		
19602	FLIPFLOP	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0		
	MONOSTABLE	14	N.R.	73/77	AU	TCVPC	6CY 2.2G 81X	2.84E 04		
19602	FLIPFLOP	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0		
	MONOSTABLE	14	N.R.	73/77	AU	TCVPC	7CY 2.2G 81X	2.95E 04		
19602	FLIPFLOP	N.R.	KVRDIP 16	81C	RADAR	REL Q	-054C 071C	/ 0		
	MONOSTABLE	14	N.R.	73/77	AU	TCVPC	8CY 2.2G 81X	6.27E 03		
19602	FLIPFLOP	NONE	DIP 16	30C	COMB/NOG	FIELD U	020C	/ 0		
	MONOSTABLE	14	N.R.	76/77	GBC	N.A.		3.93E 04		
19602	FLIPFLOP	NONE	KVRDIP 16	35C	COMMUNIC	FIELD G	025C	/ 0		
	MONOSTABLE	18	N.R.	75/76	GM	N.A.		1.73E 05		
19602	FLIPFLOP	NONE	KVRDIP 16	35C	COMMUNIC	REL Q	025C	/ 0		
	MONOSTABLE	18	N.R.	74/75	GM	EQP OP		3.73E 03		
19602	FLIPFLOP	NONE	KVRDIP 16	35C	COMMUNIC	RELPR Q	025C	/ 0		
	MONOSTABLE	18	N.R.	75/76	GM	EQP OP		5.36E 04		

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